MEDICINE

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isease was prevalent among residents of early Indianapolis. The city's low-lying swampy land, combined with a lack of knowledge about disease-causing mechanisms and proper sanitation methods, led to much sickness. Outbreaks of diseases such as malaria (popularly known as "ager" or "ague"), dysentery, whooping cough, scarlet fever, measles, pneumonia, erysipelas (black tongue), pleurisy, and milk sickness frequently occurred among the early residents. The latter disease was caused by eating the meat or drinking the milk of animals that had grazed on the white snakeroot plant (which contained the poison tremotol). Epidemics of typhoid fever, smallpox, yellow fever, and cholera were also common, killing large numbers of people. Cholera, one of the most dreaded diseases of the early 19th century, first struck Indianapolis in 1833 and again in 1849, 1854, and 1866.

Physicians could offer little assistance to the sick and suffering during much of the 19th century. They lacked knowledge of germs and infection and thus had few effective treatments. Prior to the Civil War, bloodletting and purging with harsh drugs such as calomel (a compound of mercury) and jalap were the most common remedies. Surgery was limited because of the absence of anesthesia and asepsis. Most patients were treated in their own homes rather than in hospitals.

Very few doctors had a formal education. Many studied under a practicing physician through an apprenticeship. Some had a few courses at a medical school. But standards at these early schools were lax, and almost anyone who wanted to become a physician in the early 19th century could do so. By midcentury most cities, including Indianapolis, had an abundance of doctors.

In 1821 Samuel Mitchell (d. 1837) came to Indianapolis from Kentucky to become the city's first physician. He was followed by Isaac Coe, a New Jersey native who later left Indianapolis; Livingston Dunlap (1799–1862), a graduate of Transylvania University; Kenneth Scudder (d. 1829), a New Jersey native; and Jonathan Cool, also a New Jersey native. From 1821 to 1825 Indianapolis had only five physicians to care for the sick and suffering. The scarcity of physicians in Indianapolis, however, was short-lived. By 1836 the city had 14 regular, or orthodox, physicians and a number of other sectarian doctors.

Because of the harsh treatments employed by these doctors, many persons avoided physicians altogether and relied on home remedies. For some, distance or cost made medical care inaccessible. Also, beginning in the 1830s, Indianapolis residents had a variety of forms of alternative health care available to them. Although licensing legislation had existed in the state since 1816, most of this legislation was ineffective.

The most popular alternative medical sects in 19th-century Indianapolis were the Thomsonians and the homeopaths. The former sect, founded by a New Hampshire farmer and self-proclaimed doctor, Samuel Thomson, advocated the use of a variety of botanical remedies as a substitute for bloodletting and the harsh regimens of the regular physicians. Thomson's explanation of disease and his directions for medical cures were written in lay language. During one year, two of the fifteen doctors advertising in the two Indianapolis newspapers were botanics, or Thomsonians. This sect remained popular throughout the 1830s and 1840s, but by the 1850s its popularity waned. Schisms occurred within the sect, with some of its prominent members founding other sects.

Homeopathy, another form of alternative medicine, was founded by Samuel Christian Hahnemann in the late 18th century. Hahnemann believed that "like cures like." Accordingly, administering very small doses of drugs that in large doses reproduced symptoms of the disease would cure the patient. Homeopathy, however, did not gain acceptance in Indianapolis until after the Civil War; then it became very popular, especially among Indianapolis' German population, and remained so until the early 20th century.

By the 1830s and 1840s important changes were occurring in medicine. In Europe hospitals became important to medical education, and doctors abandoned bloodletting and purging as ineffective therapies. They also learned that many diseases ran their course with or without medical interference. Doctors still had few effective remedies, but they relied on milder tonics rather than the harsh treatments of the previous era. Professional associations and university training also became important.

These ideas filtered back to the United States and were accepted by a number of physicians on the East Coast. Change came slowly to Indiana and Indianapolis, although physicians in the city played the leading role in restricting entry into the profession by establishing professional medical societies. Indianapolis doctors also took the lead in establishing hospitals and improving public health. Not until the end of the century was the reform of medicine complete.

Indianapolis established its first medical society in 1823. Known as the Central Medical Society, its major purpose was to license physicians. This association was short-lived. Not until 1848, with the formation of the Indianapolis Medical Society, was there a permanent group. The organization remained small and relatively inactive throughout much of the century. The Indiana State Medical Society (now the Indiana State Medical Association), which was formed the next year, was more active in educating physicians, monitoring the profession, and providing a means for sharing scientific knowledge. Indianapolis physicians played a major role in establishing this society; its president was Livingston Dunlap and 18 of 28 charter members were from Indianapolis—Marion County. The society included the leading physicians of Indianapolis: Dunlap, Patrick H. Jameson, John L. Mothershead, John M. Kitchen, George W. Mears, and John S. Bobbs. These men spearheaded efforts to establish medical institutions that still exist in the city today.

The idea of building a municipal hospital originated with Livingston Dunlap in the 1830s. For much of the 19th century hospitals were places of last resort for society's destitute. The only

provided minimal medical care (although hospital facilities were added in 1869). Dunlap, along with several other physicians, saw the need for a permanent place to care for the city's sick poor. Interest in such a hospital waxed and waned but peaked during epidemics. The city council approved the hospital plan in 1854, and the next year the city began construction of the facility. Financial problems plagued the institution. Building costs exceeded budget, and the structure was left vacant for years until it was used during the Civil War to house sick soldiers. After the war the federal government returned the facility to the city and it opened as a charity hospital.

Indianapolis physicians also played a major role in establishing a state mental hospital. In 1845 a committee purchased land for such an institution, and the following year the state legislature passed an act establishing the facility. The Indiana Hospital for the Insane (later Central State Hospital) admitted its first patients in 1848.

The city established its first permanent board of health in 1859. That body established municipal sanitary and food inspection standards. Prior to this, the city council appointed temporary boards of health during epidemics. During the cholera epidemic of 1833, for example, a board of health studied ways to prevent the spread of the disease. Subsequent ad hoc boards investigated the possibility of erecting a pesthouse and establishing a new sanitary system within the city.

Although Indianapolis played a prominent role in establishing medical societies, hospitals, and a board of health, it trailed other cities in the state in establishing a medical school. The first school in Indianapolis was short-lived; begun in 1848, it went out of business in 1852.

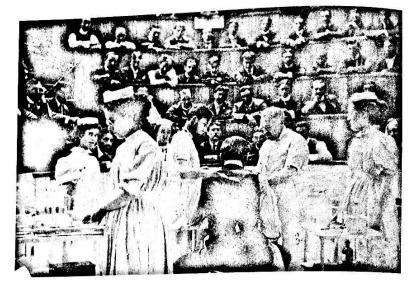
The Civil War interrupted Indianapolis doctors' efforts to reform health care. Governor Oliver P. Morton appointed Indianapolis physicians John M. Kitchen and Patrick H. Jameson to take care of all military camps in the Indianapolis area. The sick and wounded were cared for at Camp Morton, Indianapolis City Hospital, and other temporary hospitals in the city.

Contagious diseases were quite common during the war, with more men dying from sickness than wounds. Caring for the wounded on the battlefield presented special problems. In March, 1862, the state created the Indiana Sanitary Commission. Headquartered in Indianapolis and headed by Indianapolis businessman William Hanneman, this organization carried supplies for soldiers, surgeons, and nurses to the battlefield.

The last half of the 19th century saw continued medical reform and progress. With the discoveries of Joseph Lister, Louis Pasteur, and Robert Koch and the subsequent advent of the germ theory and bacteriology at the end of the century, medicine became more of a science with a body of specialized knowledge. Medical schools, medical societies, hospitals, and medical jourbody of specialized knowledge and the germ theory led to an increased interest in public health.

Advances in medical science led to the decline in popularity of sectarian medicine. Homeopathic medicine and eclectic medicine, however, remained popular and by the early 20th century had gained acceptance by the orthodox medical profession. Eclectic physicians used primarily botanic remedies, but claimed to borrow the best cures from all forms of medicine. New alternative forms of medicine—osteopathy, Christian Science, and chiropractic medicine—loomed on the horizon. Osteopathy, founded by Missouri doctor Andrew Still in the 1890s, was loomed on the principle that when the human body was sick it could be repaired by placing its based on the principle that when the human body was sick it could be repaired by placing its parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship. Christian Science, founded by Mary Baker Eddy, looked at disease as parts in proper relationship.

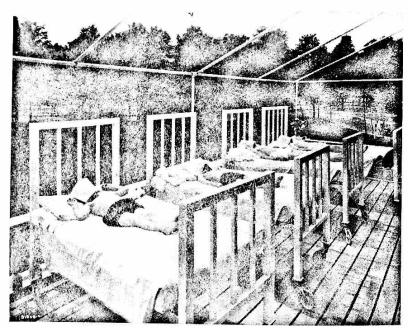




Top left: Col. Eli Lilly, founder of Eli Lilly and Company.
[Eli Lilly and Company Archives]

Top right: Medical students in the Pathology Building at Central State Hospital ca. 1900 observing an operation. [Indiana Historical Society, #C5618]

Bottom: Sunnyside Sanitarium provided medical treatment for tuberculosis patients such as the children shown in this 1925 photograph.
[Indiana Historical Society, Bass Collection, #91948-F]



Several medical schools opened in Indianapolis after the Civil War. The first was the Indiana Medical College (1869). That school affiliated with Indiana University in 1871, but the affiliation lasted only until 1876. In 1873 some of the faculty left the school to form a rival medical college, the College of Physicians and Surgeons (1874–1878). In 1879, yet another school emerged, the Central College of Physicians and Surgeons. During the last half of the 19th century Indianapolis also had a number of other schools that represented the various alternative forms of medicine. All of these schools were proprietary in nature and relied on income from tuition for operating support. Standards were low and financial problems abounded. Yet the establishment of medical schools within the city gave prospective medical students the opportunity to obtain formal education, rather than merely apprenticeship training.

Although the Indianapolis Medical Society remained small, it met monthly to share medical cases and exchange ideas. The Indiana State Medical Association, in which Indianapolis doctors played an important role, likewise gave physicians an opportunity to control the direction of the profession. Local physicians were also active in the American Medical Association (formed in 1847), and in 1879 Indianapolis physician Theophilus T. Parvin became its president. All three medical societies—local, state, and national—lobbied to limit entrance into the profession. In 1885 doctors had to obtain a license in the county in which they practiced. In 1897 the General Assembly created the State Board of Medical Registration and Examination to regulate the practice of medicine and to issue licenses.

The profession of medicine was enhanced by the creation of medical journals that allowed doctors to disseminate knowledge, share cases and treatments, and critically evaluate new therapies. The Indiana State Medical Association published its Transactions from 1849 to 1907 (which then became the Journal and is now Indiana Medicine). It is the oldest continuous medical publication in the state. A number of other journals were published within the city, including the Indianapolis Medical Journal.

With the growth of medical schools came the need for clinical facilities at hospitals and other institutions where students could observe patients. These institutions continued to serve primarily the poor. By the end of the century, however, hospitals offered advanced medical care for the middle class. This transformation was aided by the introduction of professional nursing and aseptic operating techniques.

At the end of the Civil War the federal government turned City Hospital over to the city, which opened the facility as a 75-bed charity hospital. During its early years the institution resembled an almshouse more than a hospital. The physical building was in disrepair, and the hospital lacked a trained nursing staff. In 1879 superintendent William Niles Wishard introduced important changes at the institution. Among his achievements were new and expanded facilities, a nurse training school, and aseptic hospital procedures. By 1885 City Hospital had been transformed into a modern hospital facility.

As poverty in the city increased so did the hospital population. Once-modern facilities rapidly became outdated. Overcrowding and underfunding characterized the hospital well into the 20th century. To meet the need for hospital bed space, two other institutions opened—St. Vincent Hospital (1881) and Protestant Deaconess (1899). Both were financed through private philanthropy and provided a higher quality of care than that available at City Hospital.

The city also opened a dispensary for outpatient care of the poor. Like City Hospital and other local hospitals, medical students used the facility for clinical training. Originally established in 1870 as a public-private venture, it was reorganized in 1879 and operated exclusively as a governmental agency. The dispensary experienced a tremendous increase in business during economic recessions and depressions. The City Dispensary merged with Indiana University's Bobbs' Free Dispensary in 1909 and moved to the medical school. It eventually became part of the social services division of Indiana University. Later in the 20th century outpatient clinics were established throughout the city and outpatient departments of hospitals fulfilled the need for outpatient care.

The Flower Mission also provided care for the sick poor. Funded through private donations, it originated in 1876 when a group of women decided to take flowers to the sick poor. The women instituted a training program for nurses at City Hospital, visited the sick poor in their homes, investigated cases and determined the proper course of action, and provided district or public health nursing to the poor. In 1895 the Flower Mission, with Lilly family money, established Eleanor Hospital, a hospital for poor sick children under the age of 15. The hospital closed its doors in 1909. Flower Mission also established a hospital in 1936 to care for incurable cases, particularly patients suffering from tuberculosis.

The key to good hospital care and improved public health was a well-trained nursing staff. City Hospital superintendent Wishard was instrumental in opening the Flower Mission Training School for Nurses (which later became the Wishard Hospital School of Nursing). In 1895 St. Vincent Hospital established the second nurse training school within the city; in 1899 Protestant Deaconess Hospital opened its school. By the early 20th century the city also had established a system of public health, or district, nursing to provide care for patients in their homes.

Indianapolis likewise took a lead in the public health movement. In 1880, according to an account cited by Indiana medical historian Thurman Rice, only three cities in the country had a death rate higher than Indianapolis. The common killers included typhoid fever, infantile diarrhea (also known as cholera infantum or "summer complaint"), tuberculosis, smallpox, diphtheria, pneumonia, and venereal disease. The local board of health, assisted by the newly created State Board of Health, undertook measures to improve the public health and reduce the city's death rate.

Indianapolis physician Thaddeus Stevens in 1881 secured legislation establishing a board of health within the state and a method of collecting vital statistics. In 1896 another Indianapolis resident, pharmacist and chemist John Hurty, became secretary of the board of health and turned the organization into a major force within Indiana. Although Hurty technically lacked jurisdiction over Indianapolis, he worked closely with city health officials to reduce the incidence of typhoid fever by providing Indianapolis with a safe water supply.

Cholera infantum, or infantile diarrhea, was the leading cause of death among children under the age of one. Doctors believed that the unhealthy living conditions of the poor contributed to the high incidence of cholera infantum. In 1890 a group of citizens established the privately funded Summer Mission for Sick Children to provide day outings to Fairview Park. These outings were designed to relieve the misery of poor, sick children. They did little to lessen the incidence of the disease. By the late 1890s doctors pointed to the lack of a pure milk supply within the city as a major contributing factor, and the city appointed a milk inspector to ensure its safety. In 1903 the *Indianapolis News* established a fund to provide pasteurized milk to the residents of Indianapolis. These efforts helped reduce the infant mortality rate.

The care of the mentally ill improved slightly during this period. During the second half of the 19th century the organic and physiological causes of mental illness had been identified. Leaders in the field began looking at mental asylums as hospitals and mental illness as a disease. In 1896 Central State Hospital dedicated its Pathological Department, a state-of-the-art research facility for the study of mental illness. All the scientific advances and research, however, produced no immediate cures and little improvement in living conditions at the hospital. In 1898 Norways Sanitorium opened as a private treatment facility for patients with nervous and mental disorders.

Up until 1899 the state had assumed the primary responsibility for the care of the mentally ill. Patients rejected by the state hospital were cared for in the Marion County Poor Asylum. With growing numbers of the mentally ill at the institution, and increasing numbers being rejected by the state, the city and county funded a mental institution for the "incurably insane" at Julietta. This facility remained open until 1938. Whether at state or municipal facilities, the care of the

mentally ill was far from perfect, and the institutions were constantly under public scrutiny. This scrutiny and criticism have continued to the present day.

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Deinstitutionalization of mental patients began in the 1950s with the introduction of various tranquilizers that helped control certain forms of mental illness. The result was the opening of community mental health centers such as Midtown Community Mental Health Center and Tri-County Mental Health Center. This deinstitutionalization was completed in 1994 when Central State Hospital closed its doors and the Indianapolis community assumed responsibility for the care of these patients in community mental health centers and group homes.

The late 19th century and first decade of the 20th century also saw the growth of professional dentistry, optometry, and pharmacy. Indianapolis dentists played a key role in establishing the Indiana State Dental Association (1858) and were important in the establishment of both the Indiana State Dental College (later the Indiana University School of Dentistry) and the Indiana State Board of Dental Examiners in 1879. In 1907 a State Board of Examination and Registration was formed in Indianapolis to examine optometrists.

The Indiana Pharmaceutical Association had been established in 1882, but pharmacy was not regulated until 1899 when the General Assembly created a State Board of Pharmacy. Until the late 19th century most pharmacists compounded drugs in their own laboratories. The rise of large pharmaceutical companies, however, eventually made drugstore laboratories obsolete. These companies also began conducting medical research on various drug therapies, and thus medical research moved out of the physician's office and the drugstore into the laboratories and medical schools.

In Indianapolis the founding of Eli Lilly and Company in 1876 by Col. Eli Lilly transformed pharmaceutical and medical research within the city. The company, incorporated in 1881, hired its first full-time pharmacist in 1886. As the 20th century opened, Lilly enlarged its research efforts, eventually building separate facilities and a test clinic. In the 1920s the company began the first commercial production of insulin. It became a pharmaceutical giant and one of the leaders in research on cardiovascular disease, pernicious anemia, and cancer, and the production of sulfa drugs and antibiotics. Lilly, like the Indiana University Medical Center, has become a major recruiter of the world's best medical scientists. The firm employs thousands of individuals locally and invests millions of dollars in drug research and development.

Twentieth century developments revolutionized medicine. To assist in the diagnosis of disease, for example, doctors had available a number of bacteriological and chemical tests and a variety of diagnostic instruments such as the stethoscope, ophthomaloscope, X-ray, and electrocardiograph. By the 1970s accuracy in diagnosis improved further with the use of computerized axial tomography (CAT scans) and magnetic resonance imaging. Twentieth century medical discoveries included Salvarsan for syphilis (1909), insulin for diabetes (1922), sulfa drugs (1935), penicillin (1943), vitamin B12 for pernicious anemia (1955), vaccines for polio (1954 and 1956), and cobalt treatments for cancer (1960s). Surgery likewise improved throughout the century. By the late 1960s and 1970s doctors were performing major organ transplants. Most recently, physicians have looked to genetic engineering to better understand disease.

The 20th century also witnessed a major reform of medical education. At the turn of the century all the medical schools in Indianapolis were private or proprietary. In 1910 a Carnegie Foundation report by Abraham Flexner criticized proprietary medical education and urged that state government assume this responsibility. Prior to the release of this report, Indiana schools had changed the way they operated. In 1905 one of these schools, the Central College of Physicians and Surgeons, joined with the Fort Wayne Medical College to form the Indiana Medical College (which was a part of Purdue University). Indiana University in 1903 began offering its first courses in medicine in Bloomington, with two years of clinical training in Indianapolis. In 1908 all Indiana medical schools merged with Indiana University to form the Indiana University School of Medicine.

The medical school used City Hospital and other area hospitals for teaching and research purposes. The Robert Long Hospital, built in 1914 with private money, was the first hospital devoted to the medical school, and the medical school complex expanded rapidly around this facility. Even so, the legislature was frugal with money. The school had few full-time faculty, and many professors divided their time between Bloomington and Indianapolis. As a result Indiana University ranked very low in a survey done in the mid–1930s by the American Medical Association of the nation's 77 acceptable medical schools. A special committee formed by the Indiana State Medical Association recommended that the first two years of the medical school move to Indianapolis and that the legislature allocate more money for the school.

After World War II the legislature did grant more money to the school, but not until 1958, with the opening of a medical sciences building, was the first year of medical school available in Indianapolis. The quality of medical education improved rapidly. By 1970 the Indiana University School of Medicine had become one of the nation's leading medical schools and Indiana University Medical Center (consisting of the school and its affiliated hospitals) had become a leader in medical research and hospital care.

With the advent of bacteriology, the 20th century witnessed a rapid expansion of public health services. Public health included concerns about communicable diseases, infant and child hygiene, sanitation, food and milk control, and school health supervision. Public health officials emphasized preventive medicine through public education.

In 1905 the Indianapolis Board of Health became part of the Board of Health and Charities. This government agency operated as a separate entity until 1951 when the General Assembly created the Health and Hospital Corporation of Marion County. This body provided health and hospital services to all of Marion County and oversaw the work of Wishard Hospital, as well as the public health efforts of the Board of Health. Today, the Public Health Division of the Corporation provides preventive and diagnostic health programs, health education, immunization and epidemiological programs, environmental health regulation, and code enforcement. It has several clinics and district health offices throughout the county.

Tuberculosis, venereal disease, pneumonia, influenza, infant mortality, and industrial accidents and related occupational diseases were common during the early decades of the 20th century. By midcentury cancer, heart disease, polio, and traffic accidents were major concerns of public health officials. Public health concerns in the 1990s include AIDS, infant mortality, drug abuse, environmental hazards, heart disease, and the resurgence of tuberculosis.

During the early 20th century tuberculosis (also known as consumption and the white plague) occupied much attention of public health officials. The Marion County Society for the Study and Prevention of Tuberculosis (founded in 1912 and later known as the Marion County Tuberculosis Association) and the Indianapolis Public Health Nursing Association (also founded in 1912) actively educated the public about the disease. In 1903 the Flower Mission opened a small hospital on the grounds of Wishard Hospital to care for tuberculosis patients. Five years later the city opened its first tuberculosis clinic. In 1917 Sunnyside Sanitarium opened near Oaklandon as an outgrowth of the pulmonary department of Wishard Hospital. Sunnyside provided

state-of-the-art care and treatment for tuberculosis patients. It continued in operation until 1969, when new treatments for tuberculosis made the facility obsolete.

These facilities primarily served the white population of Indianapolis. The death rate for blacks from tuberculosis was particularly high. In 1919, 134 African-Americans out of a population of 30,000 died during the first seven months of the year. The movement to provide care for black tuberculosis patients began with the black-run Woman's Improvement Club. With their guidance and support, a black tuberculosis camp opened at Oak Hill in 1905. In 1919 Flanner House opened its Free Tuberculosis Clinic. The Woman's Improvement Club also convinced the Flower Mission to maintain a ward for African-American patients at its 100-bed tuberculosis hospital that opened in 1936. The death rate for blacks, however, remained high primarily because of poor living conditions and inadequate funding. In 1940, 188 blacks per thousand in Indiana died from tuberculosis compared to 34 per thousand for whites. The introduction in 1945 of streptomycin helped reduce the number of deaths from tuberculosis. By the 1960s tuberculosis no longer posed a serious threat, although boards of health elsewhere have reported a resurgence of a virulent strain of the disease among the homeless in the 1990s.

Early in the century influenza epidemics, especially the Spanish flu, claimed many lives. The worst epidemic struck in 1918 when 548,000 individuals died from the disease. In Indianapolis alone, 969 individuals died (out of a population of 289,577). The board of health undertook a number of measures such as cleaning and fumigating streetcars, restricting admission to theaters, and banning public gatherings to help prevent the spread of the disease.

Polio epidemics occurred in 1949 and 1951. Hospitals around the city purchased iron lungs, which were large chambers to force normal breathing in polio victims. With the development of polio vaccines in 1954 and 1956, the threat of the disease subsided.

Venereal disease was another concern of 20th-century health officials. Many viewed syphilis, gonorrhea, and other sexually transmitted diseases as a problem of morality rather than as illnesses. In 1914 Indianapolis appointed a venereal disease investigator to monitor cases, and four years later the state required reporting of venereal cases. Until the discovery of penicillin in 1943, the only available treatment for the disease was Salvarsan, a mercurial compound discovered in 1909. In 1943 the Indianapolis Social Hygiene Association (later the Social Health Association of Central Indiana) was formed to educate the public about venereal disease. That same year Indianapolis opened the nation's first isolation hospital for the treatment of those suffering from venereal disease. Although cases of syphilis dramatically declined after the introduction of antibiotics, the State Board of Health has recently reported an increase of venereal diseases, now termed sexually transmitted diseases (STDs). The most recent threat has been the increased number of AIDS cases. The first AIDS case in Marion County was reported in 1982. By 1990, 307 AIDS cases had been reported and the number continues to rise.

At the turn of the century infant mortality was particularly high, especially among black children. In an effort to reduce the infant mortality rate, public health officials focused on child and maternal health. They began healthy baby and pure milk campaigns. Well-baby clinics, which offered health screening, were opened throughout the city. With the passage of the Sheppard-Towner Act in 1921 and Title V of the Social Security Act in 1935, many of these programs received federal funding.

Today, infant mortality among blacks remains prominent on the local public health agenda. A 1987 National Children's Defense Fund report revealed that Indianapolis had the highest black infant mortality rate in the United States. To reduce infant mortality, the City-County Council allocated \$1.5 million in 1990 to launch the Indianapolis Campaign for Healthy Babies. Although the Campaign for Healthy Babies initially resulted in a decline in infant mortality, a recent study has revealed that the mortality rate among black infants is higher now than it was in 1987.

The early interest in maternal health led to the birth control and family planning movement. Public health nurses realized that the many health problems of poor women could be traced to frequent pregnancies. An organized birth control movement began in the early 1900s and operated illegally until the late 1930s. The local chapter of Planned Parenthood started in 1932 as part of the larger birth control movement.

Hospitals became an important part of the health care system during the 20th century. Before the outbreak of World War II a number of new hospitals opened in Indianapolis, including Methodist, St. Francis, William Coleman Hospital for Women, the James Whitcomb Riley Hospital for Children, and the Robert Long Hospital. Even with these hospitals, Indianapolis could not keep pace with the need for hospital beds. Particularly acute was the lack of adequate space for African-Americans. Until the 1940s only City Hospital accepted black patients, even though an Indianapolis Foundation-funded study in the 1920s revealed the need for more bed space for African-American patients. In the 1940s St. Vincent Hospital opened its wards to black patients.

The Great Depression had an adverse effect on the city's hospitals since charity care increased dramatically. Hospital care was expensive, and increasing numbers of individuals were unable to pay for this care. One hospital, Protestant Deaconess, closed its doors. Others contemplated accepting health insurance, although the state and local medical societies viewed insurance as a form of socialized medicine and staunchly opposed any third-party intrusion into the field. In 1944 Methodist Hospital became the city's first hospital to sign an agreement with Blue Cross Hospital Services, and others soon followed its lead.

The world wars strained the financial and human resources of the city's hospitals. Many of Indianapolis' health care professionals were called to active duty. In 1918 the Indianapolis chapter of the American Red Cross outfitted a base hospital in honor of Col. Eli Lilly. Officially known as U.S. Army Base Hospital No. 32, the unit originally was stationed at Fort Benjamin Harrison and then deployed to Contrexeville, France. During World War II Indianapolis physicians again served on active duty. The Indiana University School of Medicine funded another base hospital, which functioned in England and Germany.

With public resources going toward the war efforts, private philanthropy became important to meet the growing needs for equipment and services at hospitals. Hospitals (including publicly funded ones) established guilds to serve as fund-raising arms. After the war the shortage of bed space became even more acute. The Indianapolis Hospital Development Association, formed in 1951 by local businessmen, assessed Indianapolis' hospital needs and undertook a \$12 million campaign to add 825 beds by 1975. To participate in this campaign all hospitals had to admit African-American patients. The campaign resulted in the expansion of existing hospital bed space and the opening of Community Hospital.

By the 1960s hospitals were affected by the spiraling cost of health care. With the advent of Medicare and Medicaid, the federal government heavily subsidized health care for the elderly and the indigent. The result was increased hospital admissions, increased physicians' fees, and increased insurance premiums. In 1983 the government acted to control costs, resulting in the loss of millions of dollars by hospitals. Inflation, expensive new technology, and declining hospital admissions led to lean years in 1983 and 1984. Some local hospitals downsized, cut staff, and relied more heavily on outpatient services. Health maintenance organizations emerged in the city,

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formed by hospitals, insurance companies, and physicians to trim expenses, and hospitals began to offer wellness programs to reduce health care costs.

As medical science improved, interest in alternative health care declined but by no means disappeared. Homeopathy, osteopathy, chiropractic medicine, and Christian Science remained popular at the turn of the century. Homeopathy declined by the mid–1920s but has recently enjoyed a resurgence of popularity. Chiropractic medicine and osteopathy remain popular, with many practitioners in the city. In 1975 the city opened its first osteopathic hospital—Westview Hospital. It is estimated that one third of all Americans use therapies and treatments outside mainstream medicine. Included among the alternative forms of medicine are chiropractic, spiritual healing, herbal medicine, acupuncture, homeopathy, and folk remedies.

Indianapolis in the 1990s is the center of the state's health care industry. Especially through the presence of both the Indiana University Medical Center and Eli Lilly and Company, the city also has gained regional, national, and even international recognition. Health care contributes significantly to the city's economy, employing thousands of workers in health-related concerns. Changes in health care, most notably national health care reform, will affect the city in profound if yet unknown ways. What is not likely to change is the city's continuing emergence as a leader in medical and dental research and treatment, a development that rests upon the vast intellectual and fiscal investments of the past 175 years.

See also: Dentistry; Hospitals; Medical Schools; Medicine, Alternative; Nursing; Philanthropy and HEALTH CARE; PUBLIC HEALTH; and individual names and institutions.