

THE ST. LOUIS COUNTY PUBLIC HEALTH JOURNAL

From the 19th Century into the 21st Century

1991

WAR ON DISEASES

A BITTER HISTORY

Victories, Disasters

Influence Current

Health Efforts

St. Louis County's Health Department has been serving the population of St. Louis County since 1906 and has been a primary source of medical care for individuals with few or no resources to support such care. The County health care system integrates health and wellness education, preventive health care, medical diagnosis and treatment.

The evolution of public health services in St. Louis city and county is the story of how the health needs of the community dictated change, sometimes in how we learned to determine what things are important in our lives. As the health needs of the community changed, a different way of thinking emerged. The new health consciousness demonstrated the full implications of choice. ♦

TO PROMOTE AND PROTECT



Prevention of health problems emphasized

St. Louis County, MO — For over 80 years, St. Louis County has fought against the great killers of humanity with the most effective weapon yet developed - a public health department. This is a report on that ongoing battle. ♦

INSIDE:

- Introduction by the County Executive and the Health Department Director.
- Public health killers in the 1800's: What they were, how they were fought, what worked, and what didn't.
- Public health in the 20th century - the triumphs and the tragedies.
- A brief review of public health activities in 1991 and a few vital statistics (see the separate Statistics Report for more numbers).
- A special insert on public health history in St. Louis County.

PUBLIC HEALTH: WHY WE DO WHAT WE DO

— an introduction

... from the County Executive



Buzz Westfall

A new beginning is a good time to look back and reflect on the past, on how we got where we are. This Annual Report will show you how and why St. Louis County developed the web of preventive services we all use and take for granted. It will show what was lost when health battles were half-fought — and what was won when public health persevered.

We need to finish the work, even when short-range benefits seem to dwindle. We need to assure our grandchildren of a healthy community. ❖

... from the Department Director



Alpha Fowler Bryan, M.D.

Public health is based on two powerful measures — morbidity and mortality. They are prime indicators of our level of civilization. This report shows why we do what we do — and what happens when we don't.

Good public health is invisible. The better it works, the harder it is to see. Cholera, malaria and TB only make the news when they happen — not when they are prevented.

St. Louis County's public health services are committed to achieving the best — leading the world in the battle against morbidity and mortality and, in the process, helping our citizens find their own highest levels of wellness.

This report was designed to reflect the spirit of the past. ❖

For more information about public health, including services we offer today, please call 854-6000.

Sources for this report on public health included County and City public health archives, the Metropolitan Medical Society, the Missouri Historical Society and the SSM Rehabilitation Institute.

Administrative offices of the St. Louis County Department of Health are located at:

111 South Meramec Avenue
Clayton, Missouri 63105

Please call, write or visit us at this location. Our public health centers and other health services are located throughout the County.

The Mission of Your County Health Services

The St. Louis County Department of Community Health and Medical Care exists **to promote and protect the health and environment of the County.**

This mission is accomplished by providing education, prevention, intervention, treatment, monitoring, documentation, investigation and enforcement services.

Our commitment is to assure services of superior quality that are fiscally responsible, sensitive to the diverse social, cultural and economic backgrounds of those we serve, and responsive to the changing needs of the community.

We encourage collaboration and cooperation with other organizations and participation of community residents, clients and employees.

For over 80 years, in one form or another, St. Louis County health officials and staff have worked to combat the causes of sickness and death. This report tells you what we've fought in the past and what we're fighting today. It suggests what we may face if we fail to maintain or rebuild the walls of preventive health practices.

We take so much of our community health for granted. Many of us have little knowledge of the protective walls of public health practices that have let us live in a carefree style. A healthy community doesn't just happen — it has to be fought for and rebuilt continuously or it is lost.

Eighty years ago, the major public health killers were tuberculosis,

cancer and smallpox. Polio was a killer. But public health progress had already been made — typhoid was no longer a scourge and malaria was not the menace it had been.

Today, the major public health killers are heart disease, cancer, strokes and accidents. We've progressed — nowadays, the great childhood killer diseases don't take their toll. TB is not a major killer anymore, although its prevalence is rising. But just as attention shifts to the lifestyle-related diseases that claim so many lives today, we notice the resurgence of the old communicable diseases.

It is useful to look at where we've been — at the successes and mistakes of the past — to plan for our future.



BEFORE THE PUBLIC HEALTH DEPARTMENTS...

To fully understand what public health services are, one first needs to appreciate the direct consequences of their absence.

CHOLERA

SCOURGE OF THE 1800'S

In 1832, cholera made its first appearance in this country. After devastating the Eastern seaboard, it traveled westward to the Mississippi. Its dreaded approach was not unheeded by the citizens of St. Louis. In a short time the disease invaded the town. The *Missouri Republican*, a newspaper of that period, said, “--we had hoped to be able to furnish a complete report of the number of cases and deaths since our last publication, but we find it impracticable. The physicians, whose duty it is to report daily, cannot obtain time from their professional duties to attend to this requisition. All of them are unremittingly engaged in the discharge of their cheerless labor. The whole number of cases reported since the 9th instant up to the last evening is 93, of which 33 have terminated fatally.”

On the 6th of November we find the following happy report:

“The cholera is rapidly disappearing from among us, very few cases having occurred in the past week, and those few in a comparatively mild and mitigated form. Many of our citizens fled from the disease, and are scattered throughout the surrounding country ... The remaining public authorities, aided by the zealous charity of the reverend clergy and of private individuals, have done much for the interest of the city, and for the cause of humanity. The sick have been ‘visited,’ the dying comforted, and the dead decently buried.”

During the week of the maximum intensity of the disease--that ending July 16th--the deaths from cholera alone were at the rate of 36,400 per annum, 57.3 percent of the entire population. By August, according to the *Republican*, “the atmosphere is so strongly impregnated with the disease that you may literally smell death in the streets.” Old cemeteries in the city were so filled with bodies that a new cemetery had to be opened southwest of town.

This was the beginning of communicable disease control in the St. Louis area.

—From “History of St. Louis City and County with Illustrations”
by J. Thomas Scharf, Philadelphia: Louis H. Everts & Co., 1883.



TUBERCULOSIS



Struggle for life in a ward in a tuberculosis hospital in the 1940's - All staff are masked and gowned to protect against infection by the dreaded killer.

THE WHITE PLAGUE

Tuberculosis in the 1890s destroyed with a consistent uniformity which placed it in the lead of all maladies. Patients with the disease were reported to have hemorrhaged so fast they seemed to drown in their own blood.

In the early 1900s, TB sanatoriums were available to the public. People, however, would only resort to them as a last measure. Though some members of the medical profession declared as early as the latter half of the 19th

century that TB was "preventable and curable," many considered a sanatorium for consumptives a death house, referring to it as the "Gate of Heaven". Often those afflicted with the "white plague" were shunned and neglected, even by members of their own families.

In 1912 there were about 5,500 deaths in the state, chiefly young men and women between the ages of 20 and 30 years. At any time, approximately 50,000 Missouri residents were totally or partially incapacitated by the disease.

In the City of St. Louis, during the years 1913-1914, TB killed twice as many people as all other contagious diseases combined.

	1913	1914
Tuberculosis deaths	1239	1502
All other deaths		
Smallpox	0	0
Spinal Meningitis	34	32
Whooping Cough	32	71
Measles	95	69
Typhoid Fever	118	91
Diphtheria and Croup	197	244
Scarlet Fever	41	131
Total all other deaths	517	638

INFLUENZA

MORE DEATHS FROM FLU THAN FROM WWI BATTLES

November, 1918 - By order of Health Commissioner Starkloff...all commercial, business, religious institutions, theaters, moving picture shows and lodges may be opened at midnight November 12, 1918. The number of new cases of influenza reported for the 24 hours ending yesterday was 350, as compared with 223 reported the previous day. Thirty-nine deaths from influenza and 11 from pneumonia also were reported. The total number of cases reported since the issuance of the original emergency closing order here is 13,498. The total influenza deaths are 700 and pneumonia deaths are 303.

RISE IN TUBERCULOSIS IN COUNTY IS CITED

300 Pct. Above Prewar Years, Health Commissioner Reports

A 300 per cent increase over prewar years in the number of new tuberculosis cases in St. Louis County, with indications that the increase may be even greater this year, was reported today by Dr. E. C. McGavran, County Health Commissioner.

Post-Dispatch
August 19, 1943

The sick have been 'visited,' the dying comforted, and the dead decently buried.

INFANTILE PARALYSIS

POLIO A CRIPPLER AND A KILLER

NEW IMMUNIZATIONS HOLD KEY TO HEALTHY WORLD



To me, the tragedy of this earth is a diseased child.

—Dr. J.Y. Joyner, in an address on October 11, 1917. From the Bulletin of the St. Louis Health Department, Vol. 8, No. 7, 1918, p. 55.

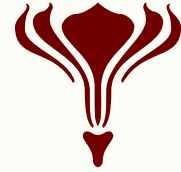
Infantile Paralysis Cases Rise Rapidly

By Associated Press

WASHINGTON, August 11.—The United States apparently will have the greatest number of poliomyelitis, or infantile paralysis, cases since 1934 when there were 7517.

Public health officials said today that 2753 cases were reported through August 7, compared with 1148 in the same period of last year and 3430 in the similar period of 1934.

Globe-Democrat
8/12/43



In order to meet the demands of a polio epidemic during the summer of 1946, County Hospital established the first Polio Treatment Center in the St. Louis area. Forty beds in the Health Center Building were reserved for it.

A concentrated drive to raise the level of polio immunizations before the summer months was started by the Health Department in March, 1960. A program of health education sponsored by the Health Department and the Medical Society urged parents to arrange for their children to obtain polio inoculations from their family physicians. All public and parochial schools were asked to cooperate by including this information in their newsletters and bulletins.

An immunization survey indicated that certain sections and age groups were not well protected against disease. Among young adults and older adults in all sections of the county the level of protection was extremely low.

“As long as there is a relatively high percentage of the County population still unvaccinated, the threat of an outbreak of polio is always present,” the Health Commissioner said. ❖

Final Shots in Polio Series To Be Given Week of March 7

The third and final shots in the polio inoculation series started last May will be given during the week of March 7, it was announced yesterday by the National Foundation.

The shots will be given at Catholic and Lutheran schools in the city and county, at some county public schools, many hospitals and the St. Louis county health department. City public schools will not participate in this final phase of the program, because of lack of school doctors.



Post-Dispatch, 2/21/60



The St. Louis area was concerned with pollution as far back as the 1890's, when the principal fuel used in both manufacturing and the home was bituminous (*soft*) coal. Coal was cheap and produced intense heat, but also produced extremely thick, black smoke.

In 1892, the Citizen's Smoke Abatement Association formed to clean up the air. Ordinances were passed to reduce the volume of smoke. Several boiler plant operators were taken to court over their pollution.

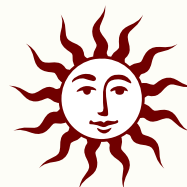
Air pollution was a problem into the 1930's. Street lights came on at midday, because the sky was dark with smoke and ash. Black soot coated clothes, houses and nasal passages.

On one day in particular, November 28, 1939 (*which came to be known as "Black Tuesday"*) the sky was completely black with coal dust. The magnitude of the problem spurred change. Clean air legislation was drafted and enforced. Burning of soft coal was eliminated and the air became cleaner and healthier. The St. Louis area became a model of smoke reform nationwide.

Today, through Stage II Vapor Recovery, new source review, permits, inspection and enforcement, St. Louis County continues to enjoy the benefits of cleaner air. ❖

For most of us, living in a community without sewers is unthinkable. But it wasn't too long ago that certain areas of St. Louis County fit that description. Through the efforts of public health sanitarians, communities like Fisher Hill were hooked onto sanitary sewers.

In the early 1980's, 72 households in that South County community had failing septic systems. According to Public Health Sanitarian Supervisor Bob Arnold, "There was sewage in road ditches, and across the yards. On washday, soapy water was everywhere. We surveyed, did dye tests, wrote letters, and got the Metropolitan Sewer District involved. The Department of Human Resources helped by paying about half the cost of the main sewer construction." ❖



The Mid-20th Century

BEYOND COMMUNICABLE DISEASES:

COMMUNITY HEALTH IN MODERN TIMES

The consequences of letting the preventive barriers of public health lapse are well-documented:

The following account is taken from the St. Louis Globe-Democrat, March 19, 1944.

A serious measles epidemic is prevalent in scattered areas of St. Louis County, Dr. I.O. Wiessman, County Health Department epidemiologist said yesterday, announcing that 202 cases had been reported from Jan. 1 to March 4, with 40 to 60 new cases each week since then. There were only 220 cases in 1943, just slightly above the annual average of the previous five years.

The current epidemic first came to notice in December, when the month's total exceeded the December average by 500 percent. The high rate continued and in February, 100 new cases were reported to the Health Department.*

(*Editor's Note: No measles cases were reported in St. Louis County in 1991.)

St. Louis Post-Dispatch, May, 1966

St. Louis Health officials predict a measles epidemic here in the early months of 1967.

...“In the large cities of the nation, measles has become a disease of economically deprived areas,” said Dr. Robert Warren, chief of the childhood virus disease unit of the Public Health Services, Communicable Disease Center. “The remaining problem is reaching children who have not been accessible to previous vaccine programs.

“When this is accomplished, measles will be virtually eradicated from the U.S.”



STRONTIUM-90 - Atmospheric Nuclear Testing & Public Health

St. Louis Post-Dispatch

April 12, 1963 - Amounts of radioactive strontium 90 found in the teeth of St. Louis area children increased sharply in 1954 and 1955 and continued to increase, although more slowly, through 1957, a report published today said.

Three members of the Washington University School of Dentistry reported...on findings based on studies of teeth donated by 50,000 children. The accumulation of radioactive material remained below levels suspected of being harmful, the report said.

Continued on page 9



German measles, a mild and unimportant disease of childhood, may have severe effects on the unborn fetus if contracted by a woman in the first three months of pregnancy.

Those who will not learn from the mistakes of the past are doomed to repeat them...

SYPHILIS BACK FROM DEFEAT

Globe-Democrat, April 23, 1963

Private physicians treat eight or nine cases of infectious syphilis for every one they report to health officials, according to findings made public for the first time Monday at a meeting here of the American Social Health Association.

The disease, once considered beaten by penicillin, now is believed to be the "largest and most serious communicable disease problem" in the nation. As a result of a questionnaire to which 72 percent of the nation's private physicians responded, the actual incidence of the venereal disease was three and one-half times greater in 1962 than

Dog Quarantine Ordered in County

Rabies Threat Prompts Action in Northwest Area

A three-month quarantine on all dogs in 20 municipalities and a large section of the unincorporated areas in northwest St. Louis County was ordered Wednesday by the County Council.

The action, under a seldom-invoked state statute, followed a recommendation by Dr. C. Howe Eller, county health commissioner, who told the council that there may be more than the two rabid dogs found recently in Bridgeton.

Globe-Democrat 3/30/60

PACK OF DOGS HUNTED AFTER ATTACK ON BOY

Rabies Control Employees Are Searching Area Near Pattonville.

Rabies control employees were searching an area near Pattonville in northwest St. Louis county today for a pack of suspected stray dogs, one of which attacked a 5-year-old boy yesterday.

Post-Dispatch 1/25/60

reported. Revised estimates place the number at 80,000 to 100,000 a year.

St. Louis public, civic and health officials...were informed that in a three-month period last year, St. Louis

doctors reported 14.5 percent of the infectious syphilis and 2.2 percent of the gonorrhea cases they treated privately. Projected for a 12-month period, the survey showed that 344 cases of infectious syphilis occurred in St. Louis, compared with 102 cases reported by doctors, hospitals, clinics and other sources. State projections showed 1,341 cases, of which 190 were reported. ♦

Strontium 90 - continued from page 8.

Radioactive content of baby teeth rose from .18 strontium units in 1949, when the study started, to 2.56 units in 1957, the report said. Somewhat less strontium 90 was found in the teeth of children who were breast fed than in those who were bottle fed.

"Most of what is known about radiation damage to bone has come from much higher doses than 2.56 strontium units," the report said. "Very little is known about the effect of the gradual accumulations of small amounts of

...the rapid strontium 90 increase in 1954 and 1955 came during a period of intensive nuclear bomb testing.

radioactivity in bone, and the baby tooth survey is helping to fill one of the gaps in our knowledge by providing information on the changing levels of strontium 90."

The radioactive materials accumulates in teeth at the same rate as in bones, the report said, adding that the rapid strontium 90 increase in 1954 and 1955 came during a period of intensive nuclear bomb testing. ♦

THE HEALTH OF THE COUNTY THIS YEAR ...

Home
Health brings
health care
services to the
patient's home.



AIDS

In response to the growing concerns about HIV infection, DOCHMC implemented free HIV counseling and testing at all four County health centers in 1991. Those who test positive for the HIV virus are referred to medical services, social services and support groups. A partner notification program is also included.

HOME HEALTH AGENCY

In 1991, St. Louis County residents received over 6,000 visits from the Home Health Care staff. Our staff provides professional health care services at less cost than institutionalized care while allowing the patient to remain at home in a familiar environment. The agency provides nursing, personal care, physical therapy, occupational therapy, speech therapy, a social worker and nutrition services.

In addition to providing care for the high-risk elderly, the agency also provides services in maternal cases in which patients are having complications in pregnancy or post-delivery.

Through the agency's cost-effective management services, county taxpayers have been saved approximately \$1 million a year in acute care expenses to St. Louis Regional Medical Center.

INFLUENZA VACCINATION PROGRAM

The flu is not always just an uncomfortable inconvenience. Historically, influenza pandemics (*worldwide outbreaks*) have caused the deaths of millions. In 1900 influenza and pneumonia were the leading causes of death in America.

Today, influenza can still be very serious for certain at-risk individuals: the elderly, those with chronic diseases and other respiratory problems, and the immunosuppressed.

In 1991 DOCHMC responded to this need by supplying 24,000 vaccinations to those county residents most in need. The program began Thursday, October 31 at the Jewish Community Center where 2,751 vaccinations were given. Vaccinations were then offered throughout the county. This type of public health program can prevent most serious illnesses and save money by decreasing costly hospital stays.

NUTRITION AND WIC

The Nutrition Program supports the DOCHMC medical, clinical and community programs, and administers the Women, Infants and Children (WIC) supplemental food program. Staff do individual nutritional assessment, counseling and monitoring of the special problems of patients participating in the women's health, pediatric, adult medicine and adolescent programs.

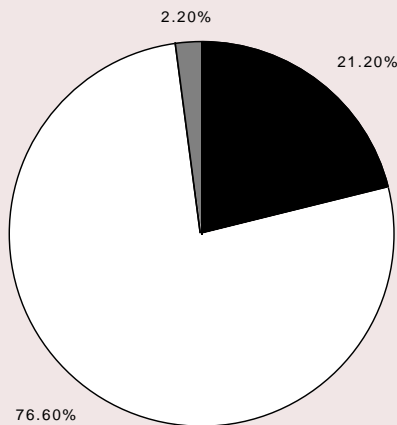
WIC serves all County residents regardless of their source of health care. This federally-funded program enables high-risk pregnant women, post-partum women age 18 and under, infants and children through age four to receive free supplemental food. Services include medical evaluations, group nutrition education, individual nutrition counseling and food delivery. Community contacts include consultations, group presentations and student training.

OLDER ADULTS

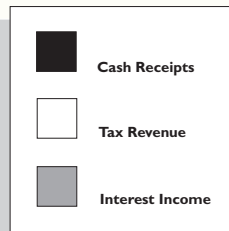
Adults aged 65 and over were 13 percent of St. Louis County's population in 1990, up from 10.5 percent in 1980. Responding to this trend, DOCHMC's Older Adults Health Services developed programs to promote independence in this population. Optimal independence meets two goals: a better quality of life for older adults and their families and a reduction in public costs for institutional long-term care.

In 1991 DOCHMC's Nutrition/WIC unit recorded 18,843 visits for clinical services and 824 community contacts. By the end of 1991 there were six WIC sites countywide. Two other WIC sites, Maplewood and Meacham Park, were relocated. ♦

Revenues

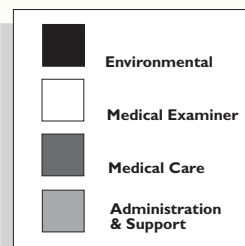
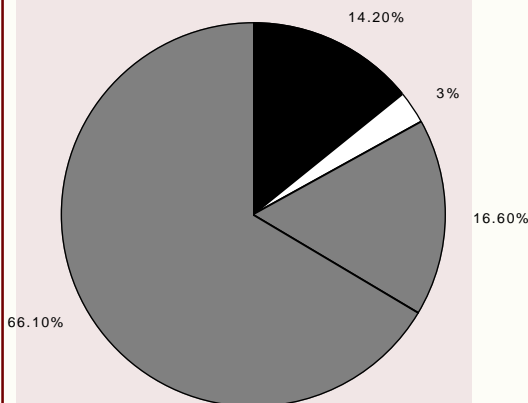


WHERE DOES THE MONEY COME FROM - AND WHERE DOES IT GO?



While meeting the demand for ever-increasing levels of service and facing the challenge of ever-rising costs, DOCHMC collected 33.8 percent more in 1991 than in 1988. These funds are kept by DOCHMC and included in the budget to help pay for needed services and programs.

Expenses



Home Visit: A Public Health Nurse checks the health of a new baby during a visit with the new mother.





ST. LOUIS COUNTY
PUBLIC HEALTH JOURNAL
 Selected Health Statistics: 1991

Teen Clinic Visits	5,839
Children's Clinic Visits	25,980
Dental Clinic Visits	13,087
Child Mental Health Services	20,923
Immunization Clinic Visits	18,062
Family Planning Visits.....	15,271
Maternity Clinic Visits	8,663
HIV Testing Visits	4,663
Public Health Home Visits	11,333
Medicine Clinic Visits	21,437
Nutrition Services	19,843
Older Adult Health Services	2,746
Social Services	6,359
Corrections Medicine Services	39,362
WIC Voucher Service	83,931
Shelter (Homeless) Encounters	1,045
General Sanitation Services	38,113
Total Animals Handled	14,532
Home Health Agency Visits	7,606
Total Clinic Visits	183,089

VITAL STATISTICS
 St. Louis County, 1990 and 1991

Selected Vital Statistics	1990		1991	
	Number	Rate	Number	Rate
Live Births	14,626	14.7	14,562	14.6
Deaths	8,321	8.4	8,541	8.6
Infant Deaths	140	9.6	139	9.5
Fetal Deaths	89	6.1	82	5.6
Maternal Deaths	1	0.7	0	0.0
Population	993,529		995,000	

Five Leading Causes of Death

Causes	1990		1991	
	Number	Rate	Number	Rate
Heart Disease	2,962	298.1	3,014	302.9
Malignant Neoplasms	2,105	211.9	2,233	224.4
Cerebrovascular Disease	517	52.0	516	51.9
Influenza and Pneumonia	359	36.1	331	33.3
Chronic Pulmonary Disease	322	32.4	302	30.4

St. Louis County Department of Health

Administration Building
 111 S. Meramec Ave., Clayton, MO 63105