

1916 INFANTILE PARALYSIS (POLIO) EPIDEMIC

The 1916 epidemic was the most devastating epidemic in the history of infantile/poliomyelitis. New York and New Jersey were the first to experience outbreaks. It was typical for outbreaks of the infection to surface during the summer months. Across the United States in 1916, infantile paralysis outbreaks took the lives of about 6,000 people, leaving thousands more paralyzed. Trenton, in proportion to its population, would eventually become the most seriously affected city in the United States.



Shaded areas show localities particularly involved with the infantile paralysis epidemic of 1916 from Public Health Reports, November 24, 1916

The virus is contained in the secretions of the nose, throat and intestines of persons suffering from the disease or convalescing from it. It was also discovered in those who have been exposed to cases. A healthy baby may be turned into a cripple over night by the disease. Infantile paralysis affects mainly young people. However, infrequently it does affect adults and no ages were absolutely free of danger of the infection. The disease is more fatal in older persons. The number of cases which became temporally or permanently paralyzed forms only a small proportion of the total number of cases of the disease. In order to control the disease, it is important that infantile paralysis should be diagnosed in its pre-paralytic stage, so that protective measures may be undertaken early.

In 1916 no one knew how infantile paralysis spread. Was it through the air or through water and food? There was no shortage of theories, from both medical and lay people. Some blamed summer fruits, ice creams, candy, maggots in the colon, insects, raw sewage, garbage, dust, poisonous caterpillars,

moldy flour, contaminated milk bottles or even bananas infected by tarantula spiders. Others advised parents to avoid children, believing the disease to be transmitted through sneezing, coughing, spitting and kissing.



(From the Birmingham Age-Herald.)
KEEP HIM FROM YOUR CHILD.

Published in the Arkansas Gazette 7-13-1916

The association between dirt and disease was extended to the idea that maybe the ubiquitous housefly carried the germs of infantile paralysis – from filth to food, from the ‘dirty’ immigrant quarters to the sparkling ‘clean’ houses of the leafy suburbs.

Discoveries in the field of tropical medicine in the late 19th and early 20th centuries had shown that mosquitos, fleas, flies, and lice could transmit diseases like malaria, yellow fever, plague, sleeping sickness and typhus. The housefly was everywhere, buzzing on the piles of horse dung in the streets, swarming in the garbage cans, then alighting on babies or infecting food. Attacking the housefly became a major preoccupation. Garbage bins were sealed, houses were screened, windows shut, fly swatting contests were held, while posters and pamphlets featured an image of a giant housefly menacing children.

FLY-SWATTER IN ACTION



HEALTH BOARD DECREES DEATH OF THE PESKY FLY

Army Of Boys And Girls Begin Swatting Contest
Throughout The City

Published in the Virginian-Pilot, July 20, 1912

We now know that infantile paralysis was spread primarily through contaminated water, food or unwashed hands.



Illustrating how diseases like infantile paralysis spread: a girl hugs a stray cat that she picked up while feeding on garbage. (from Disease by Mary Dobson)

Trenton was prepared to meet the emergency of caring for the increasing cases of infantile paralysis. A clinic devoted to the disease was set up at City Hall. Dr. Alton S. Fell, Trenton's Health Officer, engaged the services of Mrs. Margaret Buchanan, a trained masseuse, to take charge of the convalescent infantile paralysis cases in the clinic and to provide homecare. Mrs. Buchanan was a Trentonian that had collaborated to a great extent with the leading physicians of Philadelphia in the treatment of infantile paralysis. Trenton prepared to meet the emergency of caring for cases as instructed by the State Department of Health. Mayor Frederick W. Donnelly reported that the city was prepared to care for twenty-five (25) to thirty (30) cases. The building at Trenton's Municipal Colony in Hamilton Township, formally used as a children's hospital, was fully equipped and could be used at a moment's notice.

Sat, Jul 15, 1916 | Trenton Evening Times (Trenton, NJ) | Page 7

FORMER TRENTON NURSE WRITES TIMES FROM NEW YORK TO WARN MOTHERS AND OTHERS AGAINST INFANTILE PARALYSIS EPIDEMIC

To the Editor of the Times.

Sir—I wish you would give some additional directions to the mothers and others of Trenton during these days when Infantile Paralysis is prevalent.

I find that many mothers are under the impression that the disease can be contracted only in infancy, or during the first three years of the child's life. As a matter of fact children of any age and even adults are stricken with the disease, some times when they are seemingly in the best of health. This is especially true if they are living in a house where a case has developed.

Mothers and other care-takers of children should be warned first of the need of absolute cleanliness. Leave no garbage cans remain uncovered. Remove all possible disease breeding refuse.

Children must be washed before partaking of food. Their hands should be washed frequently during the day. Many children are infected by reason of dirty hands, the infection being carried to the brain and spine through the nose and throat.

Many children have a habit of sucking dirty fingers and thumbs—seemingly the dirtier the better, or worse. Break them of this habit at any cost.

Mothers should also keep their children away from crowds where there is possibility of contracting the disease.

Children should eat no fruit or other food unless it has been thoroughly washed or well cooked.

By all means Swat the Fly. Flies may carry the disease from a sick child to one in the best of health.

Mothers should not visit sick children in other families nor allow their children to do so.

In case of illness of any kind call a doctor at once.

I am a former Trentonian and am naturally interested in Trenton people and their children. I visited Cadwalader Park last Wednesday and saw hundreds of happy children at play. As a former hospital nurse and as a lover of children I thought what a terrible thing it would be to have an epidemic in Trenton.

Very respectfully,

MARY DEMPSTER HOFMANN.

1847 Bromdale Avenue, New York.

In an effort to combat the increasing statistics of infantile paralysis, an stringent quarantine was placed on the city of

Trenton in August 1916. A special meeting of the City Commission was held in Mayor Donnelly's office. The Health Officer, Dr. Fell recommended a drastic measure. **Under its provision all non-resident children under the 16 years of age are prohibited from entering the city; resident children under the age limit now beyond the confines of the city will be permitted to return home with proper certification from the health authorities of the place or municipality from which such child shall come, in the effect that he or she is free from infection or has not been exposed to infantile paralysis.** Within one day of the order, a sweeping mandate was effective immediately. No child would be allowed to leave the city, according to the City Commission. Patrolmen were stationed at every ingress and egress to carry out the order of the Commission.

Trenton schools were scheduled to begin that year on September 11th. The City Commission and School Board President Herman C. Mueller along with the City Health Department suggested that schools remain closed until October 2nd. Delay in the opening of schools was justified by disease records. The records in the Health Department indicated that ten-month-old Dorothy Demby of 231 Allen Street was the first Trenton resident to be diagnosed with infantile paralysis on July 16th. Since that time thirty-seven (37) cases of infantile paralysis were reported and the total number of deaths in those reported cases was thirteen (13). The death rate for infantile paralysis in Trenton was 33 percent, which was abnormally high. The City Commission felt that to open the schools at the usual start date of the year would place the children in an unnecessary danger of contracting the disease. The State Board of Education would agree with the postponement of the opening of Trenton's schools. The schools affected by this order were the normal and modal schools of the city, the normal at Montclair, the School for Deaf at Trenton and the School for Colored youth at Bordentown.

In

| Number of cases of poliomyelitis reported by Trenton to the US Public Health Service in 1916 | |
|--|----------------|
| Week Ending | Cases Reported |
| August 26 | 11 |
| September 2 | 7 |
| September 9 | 11 |
| September 16 | 14 |
| September 23 | 23 |
| September 30 | 34 |
| October 7 | 20 |
| October 14 | 8 |
| October 21 | 12 |
| October 28 | 4 |
| November 4 | 1 |
| November 11 | 1 |
| November 18 | 0 |
| TOTAL | 146 |

from Public Health Reports, November 24, 1916

mid to late September, Dr. Fell drafted a letter to the City Commission to report that more cases of infantile paralysis had developed since the quarantine was declared by the city just more that a month prior. Dr. Fell drew from this the conclusion that the city's quarantine had been wholly ineffective. He also mentioned that the quarantine in New York, Philadelphia, and other places amounted to nothing in so far as safeguarding a community. He further stated that infantile paralysis can strike in one place, then another place in the city and there seems to be absolutely no connection. In the majority of instances, the patients and their families have not been outside of the city nor had anyone visited them. It attacks one child in a family, seemingly without rhyme or reason. The city quarantine had been exceedingly rigid, in fact drastic. It meant fighting the general public every day of the week. Dr. Fell had further recommended that the schools should not open, and to continue to postpone the opening of schools until the date agreed upon.

On September 19th, the City Commission met, in attendance were Mayor Donnelly, Commissioners Dr. Fell, George B. La Barre (police) and Edward W. Lee (finance). The city quarantine was officially lifted. The State quarantine was adopted, which allowed children to obtain permits for entering and leaving the city. The State Health quarantine officers were to maintain the railway stations, at the bridges and boat terminals. The goal was to prevent children from other states from entering Trenton with the required health certificate and vice versa.

On October 30th, Trenton Public Schools opened the fall schedule as planned. However, enrollment was below what was expected, especially at Junior No. 1. Principal Dr. William A. Wetzel expressed a belief that the decrease was due to the fear of infantile paralysis. There was a spike in the numbers earlier in the month, two to nine case reported daily. As a result, households with children were terrified.



Exercising a paralyzed leg

At the Municipal Colony there were about ten children at various stages of infantile paralysis. Most were from homes of poor city residents and several would become crippled for life. Mayor Donnelly and the City Commission suggested that an effort should be made to ask the public for contributions to create a fund to take care of these children. Noted expert doctors James K. Young (orthopedic surgeon in Philadelphia) and William G. Elmer, both former Trentonians, were called back to Trenton to test paralysis cases. They were called for the purpose of examining and determining just what course of treatment should be followed to benefit their condition.



Therapeutic exercise before a mirror

At the time, the NJ State Department of Health stated that the infantile paralysis situation should not cause undue alarm. Attention should also be given to other diseases that are of far greater importance in the list of death causes. Among those disease were typhoid fever, measles, whooping cough, tuberculosis, and summer diarrhea of infants. Tuberculosis was the greatest single cause of death in NJ. It was essential that efforts for prevention be directed with reference to the importance of these various diseases.



1953



President Franklin Delano Roosevelt

President Franklin Delano Roosevelt was perhaps the most famous victim of what historians think was polio. He was stricken with an illness in 1921 that left his legs paralyzed for life. He avoided being photographed in his wheelchair, and he used braces and canes to appear to walk.

Two rivals in developing a vaccine for polio were Jonas Salk and Albert Bruce Sabin. The Salk killed vaccine (produced by killing the virus completely) was given by injection and is the approved vaccine in the US because of its greater safety. The Sabin oral, attenuated (live version of the virus with reduced virulence) vaccine is given in many parts of the world because of its ease in administration. Thanks to a successful vaccination program, the US has been polio free since 1979.



Sabin oral vaccine on a sugar cube

BUREAU of HEALTH

Trenton, N. J.

This is the week of the **ANNUAL CLEAN-UP CAMPAIGN.**
Let's do it together.

BE THOROUGH NOW AND KEEP IT UP ALL YEAR.

It will last for a week but should be kept up all the year.

THE CITY AUTHORITIES WILL DO THEIR PART.
WILL YOU DO YOURS?

The city will clean all the vacant lots and public alleys.
Get everything together now and put it out for the collectors.
Get at it now.

**CIVIC CLEANLINESS DEPENDS PRIMARILY
ON THE INDIVIDUAL.**

Let every householder and housewife do his or her part and
then get her neighbors interested in the good work.

INFANTILE PARALYSIS MAY COME AGAIN.

Do your part in keeping it away from the city this summer
by cleaning everything up.

WHAT TO DO.

Clean all storerooms of old, useless, wornout things.
Clean all cellars and arcaways of rubbish and dirt.
Clean all the back yards of the winter's refuse.
Clean all the rear alleys. They always need it.
Clean out everything you don't want or can't use again.

THEN USE LIME.

It's cheap, easy to mix and use. One of the best things
for people to use in cellars, arcaways and similar places. It
not only sweetens, but **BRIGHTENS THE CORNERS.**

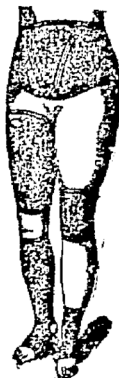
**GIVE YOUR ENTIRE PREMISES A THOROUGH
CLEANING.**

You cannot be properly patriotic amid dirty surroundings.
Don't Be a "Slacker" Either in Patriotism or Cleanliness.

Do It for Trenton, and Do It NOW.

A. S. FELL, M. D.,
Health Officer.

Trenton Evening Times, Sunday, May 8, 1917



INFANTILE PARALYSIS

cripples can be relieved and oftentimes cured by
properly fitted Brace made to order by

PETER J. MAY
230 East State St.

who also specializes in Trusses, Bandages, Abdominal
Supporters, etc.

Lady in Attendance.

Trenton Evening Times, Sunday, June 24, 1917