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Charlotte Bridges West Chester University of Pennsylvania

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The West Chester Board of Health, 1885-1960

by Charlotte Bridges, HIS 480 (submitted April 28, 1999) Web adaptation copyright 2004 by Jim Jones

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1. The West Chester Board of Health Systematizing Health

The West Chester Board of Health was in the forefront of systematizing health and sanitation in West Chester between 1885 and 1960. The systematization of sanitation and health in West Chester emerged from a piecemeal approach to these issues as rules and laws were added onto old ones to create a web of regulations designed to keep the borough clean and healthy. It was not a conscious process, just an inevitable one. The Board of Health was the spider in this web of organization.

This paper describes the process West Chester went through under the initiative of the Board between 1885 and 1960. The Board of Health was created in 1885 to help the town get control of contagious diseases and except for polio, they were largely successful by the 1960s. This was also the end period for which articles on this subject are available in the Chester County Historical Society's Newspaper Clipping Collection.

My research consisted of an extensive study of the Newspaper Clippings file at the Chester County Historical Society in West Chester which is an excellent resource for historical research available thanks to the Society and their volunteers. I used the Chester County Library Oral History Collection and the interviews of Riggtown residents on the Riggtown history homepage.(<u>1</u>) These interviews gave me a feel for the times and insight to the reality of the changes that concerned the Board of Health. I also used several secondary works about sanitation and health issues in America at different times in order to place West Chester's experience in relation to a national development.

We take a lot for granted when it comes to sanitation, plumbing, vaccinations, garbage collecting, and the absence of epidemics. Today, because we do not face the same problems with health and sanitation as earlier generations, the harsh, strictly enforced regulations the Board of Health initiated might seem extreme, but over all they did what was needed to effectively deal with the health dangers of contemporary urban environments. However, if one reads the Chester County Health Department's regulations one will recognize many of those extreme laws still in use. In theory, we no longer have a need for most of them in everyday life.(<u>2</u>) It was not the measures taken that were extreme, but rather the environment.

The West Chester Board of Health was part of a larger network of similar municipal organizations and a movement all through the nation. They were agents of change and a product of their time. This paper aims to describe the initiatives taken by the Board of Health, the methods they used to enforce health legislation and regulations, and how they were perceived by the public. I will also touch on the result of their efforts and how they compared in comparison to the rest of the nation when it came to sanitary reform. The purpose of this paper is to show, by describing the Board of Health's actions, how the process of organizing sanitation and health was a piece by piece effort and to offer a base for further research into relating subjects. In the different parts of the paper I have included some interesting questions and suggestions for more detailed and limited investigations in the different sections.

2. Preceding the Board of Health

There were measures taken to deal with the sanitary conditions of West Chester prior to the creation of the Board of Health but the change was immediately noticed once the Board was established in February-March 1885.(3) Sanitation and disease prevention before the creation of the Board of Health had been piecemeal and badly organized in West Chester and other towns in the country.(4) The Board of Health seems to have been a very decisive group that set out to battle the sanitary conditions in the town. An immediate increase in action can be seen in the newspapers at the time. The Board continued being active and resolute during its entire time of existence. It appears that the West Chester Board of Health was replaced by the Chester County Board of Health in 1967, which took over the responsibilities for the health of the citizens of the entire county and continued the same work the West Chester Board of Health had been doing.(5)

In the first half of the 1800s understanding of disease was limited and connected mainly with filth and smell.(6) In 1857 when the germ theory was published the understanding about contagious diseases grew.(7) In the local newspapers articles about the filthy conditions of streets, yards and streams are frequent during the mid 1800's. The earliest concerns in West Chester seem to have been the animal presence in the town.(8) American cities at this time had a large amount of animals within its boundaries.(9) Pigpens in the borough in the summer were a very early concern and one connected with not only foul smells but disease as well.(10) Before the Board of Health was created, a Sanitary Committee made up of Borough Council Members inspected gutters, pools, and back alleys in West Chester.(11) In the 1860's, '70's and '80's, cellar inspections were held and the Sanitary Committee posted notices in the newspapers for all citizens to clean up their yards and cellars for the inspection. At the time, this was expected to prevent the onset of plague.(12) Sanitary surveys like the cellar inspection started to map out cities' sanitary needs around the country in the latter part of the 1800s and became more organized with the creation of Boards of Health on the local, state, and federal level (this became the forerunner of city planning).(13)

In the 1880s, West Chester needed a Board of Health. Worried citizens wrote to the newspaper about the filthy conditions in the Borough's streets and yards, and their fear that epidemics would result.(14) They suggested that a Board of Health would deal with problems more directly and timely.(15) It would be interesting to find out to what extent this was something everyone was aware of, or if there was a group of middle class reformers that were being heard through the newspapers. Who were the reformers in West Chester? On a national level, they were most often middle-class or upper-class women who led the sanitary reform movement.(16) In Chester County, doctors seemed to be on the forefront of the reform at this time.

The Chester County Medical Society was one of the more engaged medical societies in Pennsylvania and it initiated the creation of the State of Pennsylvania Medical Society.(<u>17</u>) The State Medical Society took a great part in creating a Pennsylvania Board of Health just about the time the West Chester Board of Health was established in 1885.(<u>18</u>) More than likely, the members of the Chester County Medical Society were also part of creating a West Chester Board of Health earlier that spring. The first members of the board were physicians.(<u>19</u>)

3. The members of the Board of Health

The Board of Health consisted of prominent residents of West Chester. They were not elected or appointed for a specific term. When the Board of Health was created in 1885, it consisted of the Chief Burgess and six to eight physicians. They held regular monthly meetings, of which most were summarized in the Daily Local News and other local newspapers. The composition of the board changed with a new law in May 1893 that declared that the Chief Burgess should appoint five members for the Board, one of whom had to be a physician. The Board members were not compensated for their services.(20) The new Board of Health was granted greater authority to enter premises and their duties were more clearly defined (21) A borough ordinance was published in November 1893, which meant that the health regulations that the police had previously had to urge people to follow had become law. This ordinance, which described in detail the concerns of the Board of Health, was important enough to be published in pamphlet form and distributed.(22)

The position of Health Officer was created immediately by the new Board of Health and granted an annual salary of \$100. The Health

Officer answered to the board and had full police power to enforce Health and Sanitation Ordinances. (23) A police officer, James Finn, was appointed to the position and another police officer became his assistant for the same pay. (24) Since the inauguration of the Board of Health, the police assisted with the cellar inspections and the enforcement of health rules and regulations. (25) During the duration of the Board of Health's existence the Health Officers were the enforcement arm of the Board. They supervised and performed the cellar inspections, quarantines, food and milk inspections and anything else that was decided upon by the Board of Health.

People reported violations of the Board's ordinances and regulations and made complaints about oyster shells and garbage in the streets, garbage collection, and people suspected of having a contagious disease. These complaints were discussed in the meetings of the Board of Health, which then instructed the Health Officer look at the problem. Problems were assessed again on the next meeting, or earlier if needed. (26) At times, people complained about the way their neighbors told on them and criticized the fact that the Board of Health did not disclose any names of informants. The Board of Health felt that it could endanger the person if they let people know who reported them. (27)

After 1893, the board consisted of a president, a secretary, and three members. They included doctors, business owners, professors, public servants and other well respected professions. There was not a great turnover of members. From my list of Board of Health members from 1893-1957, it seems fair to conclude that the members remained on the board until they felt like leaving, in which case they were replaced by someone else. No time period of service seems to have been declared.

It is not clear what the members got out of serving on the board other than the satisfaction of doing good. Undoubtedly the position brought with it a certain power and respect. The power of issuing licenses to sell food or milk, or to work as a plumber, among other things, were part of the board's duties. It is possible that such power was used to send business a certain way, or benefit family members. The various inspections also raises the question as to whether a Health Officer would overlook certain discrepancies in a household where he had friends. The inspectors did display a general concern with the residents of the borough because of the nature of their position; however, it would be interesting to examine if their decisions favored certain people, neighborhoods or businesses or if it was a neutral board that played no favorites. For this paper, I have collected the names of the members of the board and shown which economic bracket of society they were from in order to invite further research into the members backgrounds and their personal motifs for being on the Board of Health.

4. The Board of Health's actions

a. Garbage Collection

The Board of Health organized and improved the garbage collection of the borough, which was a difficult task considering that their ordinances were not always obeyed by the citizens of West Chester, and their recommendations were not always taken seriously by the Borough Council. Still West Chester seems to have been pretty much on time compared to similarly sized cities when it came to garbage removal methods. (28)

Garbage and filth in West Chester's streets and alleys was real concern in the late 1800s, and disease and death was blamed on the unsanitary conditions.(29) In 1885 when the Board of Health was created, one of its first actions was to order garbage vessels to be placed at the end of every street to make it easier for the street men to pick up.(30) Garbage removal needed to be organized and it was suggested the following year that garbage be collected on a certain time and day so that the citizens would know when to bring their garbage out for pick up.(31) It seems that this was to reduce the time that waste was kept in houses or in the alleys. The garbage was taken by the street men and carried away to the borough dump.(32) An ordinance in 1893 further makes it clear that any solid household waste must be put out in the proper receptacles for the borough authorized person to remove to the borough dump and any decaying matter was not to be kept in the house for more than 24 hours. In 1893 West Chester was expanding to the point that the borough dump could not be used anymore and the Board of Health felt that burning the garbage would create a nuisance.

Apparently the problem of where to dump the garbage was a difficult one and, for spatial and economic reasons, there was even a suggestion to have a public contest to find the best solution. (33) Dumping of garbage in the alleys was also a problem. People dumped garbage in empty lots and the Board of Health, with the help of Health Officers, tried to control and fine

the violators.(<u>34</u>) Ashes dumped in the alleys were picked up by the ash gatherers, but if other waste (like paper) was dumped in with the ashes, it made the job more difficult and the papers would fly all over the streets.(<u>35</u>) Even spitting in the streets became illegal.(<u>36</u>) Health reasons were not the only reason the waste was controlled. Keeping the borough clean and pretty for visitors was something the borough leaders strongly emphasized.

In 1900 the Borough Council of West Chester went to Wilmington to inspect an "apparatus" that reduced household waste to ashes. (37) The idea of a garbage incinerator was not popular with the Borough Council, and it decided that it was cheaper for West Chester to pay hog farmers to collect the garbage and use it as animal feed. (38) This was a common way to dispose of garbage in America at this time. (39) In January 1901, the Board of Health suggested the necessity of a garbage burning plant since the borough was growing and so was the amount of waste, but their request was denied. In 1902, the Board of Health again recommended to the Borough Council to erect a \$5,000 garbage burning plant, but Dr. Woodward, the Board's secretary, felt that their recommendations were useless since the Borough Council would deny them. (40)

Until 1912, there seems to have been no control over who collected garbage in West Chester. Everyone had their own local "slop man" or garbage collector.(41) On August 30, 1912 the Board of Health awarded the contract for collecting the garbage of West Chester to one man, Lewis M. Hickman. Hickman was contracted by the borough to take anything except "paper, brush, weeds, bottles, tin cans or ashes" which the borough men would take. He provided a lot fifty feet from the borough line where he had dug pits for garbage that the "piggeries" could not use. It was close to the Darlington Seminary on land formerly owned by Magistrate Paxton. Joseph Scattergood of the Board of Health, who also was a member of the State Board of County Health Commissions, felt that even if the dumping lot was outside of the Borough limits (a Borough requirement), it was too close to the Darlington Seminary and violated state health laws. West Chester citizens had garbage pile up in the yards and streets until the issue was resolved and Hickman sent his men out to collect.(42) When they finally got approval, Borough residents saw it as a great improvement. As the borough grew, one can assume that the problem of accumulating garbage grew as well.

The Board discussed the idea of a garbage burning plant for a very long time. Beginning at the turn of the century, the Board of Health regularly recommended it to the Borough Council, but they hesitated because of concern with the cost.(43) In the 1940s the Board of Health was still fighting to get an incineration plant for garbage.(44) In 1954, the incineration plant became an even more urgent issue since State Law began to require that garbage be boiled before it was fed to animals to prevent disease. (45) This increased the cost of collecting garbage and led to consideration of alternatives. The Borough Council proposed using garbage as a commercial fertilizer since this was less costly than an incineration plant. (46) However, if this was not possible or realistic the pooling of resources by different townships might be a solution for getting a garbage incineration plant in West Chester. The economic reasons were valid ones, but it seems, from an outsider's point of view, that this issue dragged a little too long (50 years). When West Chester finally got an incineration plant is unclear from the research I have done. It was not done within the period I am dealing with in this paper. (Editor's note: West Chester never did build a garbage incinerating plant.)

b. A Sanitary Sewer System

Slowly but surely, West Chester got a sanitary sewer system and everyone was required to connect to it. This was initially a piecemeal venture where sewer lines were laid as needed and houses were connected one at the time in no special order. From the beginning of the 20th century, the issue was a constant concern of the Board of Health and in the 1910s, a sanitary sewer system was put in place.

Before there was a sanitary sewer system in West Chester, conditions must have been pretty miserable. Waste from households, restaurants and businesses accumulated in cesspools and culverts, and cesspools leaked into yards and alleys. In the 1860s cesspools became regulated to their size and depth. In 1885, the Board of Health established strict regulations on how to build and clean a "privy well or a cesspool" by passing an ordinance that required the cleaners of cesspools to remove their entire content, then report to the burgess if the cesspool was the correct depth (8 feet) or if it was not walled up by stone or brick. (47) At the Board of Health meetings, cesspools were a constant source for complaints.(48)

In the late 1800s, the need for a sanitary sewer system in West Chester became obvious and the Board of Health slowly began to try and improve the situation. Physicians were concerned about unsanitary sewers that were considered a cause of disease.(49) In 1885, the newly created Board of Health decided to put sewer filters on each street, possibly to prevent animal carcasses and other potential decomposing material from being deposited there. (50) In the United States at the time, sewers were often big enough to allow a man to clean it out by climbing inside.(51) In West Chester in 1893, the new Health Ordinance regulated who could connect to the sewer. No one was allowed to tap into the sewers of the town on their own without a permit from the borough Council.

The sanitary sewer system was a constant concern of the Board of Health in the first 10 years of the century. (52) In the early 1900s, the problem with sanitary plumbing became more intense. One newspaper article suggested that that the Board of Health did not know enough about plumbing, and called for a sanitary plumber to determine whether plumbing was done correctly or not. (53) An ordinance in 1901 required every house owner to connect their wastewater outlet to the sewer. (54) As the Borough grew, the work on the sewer system expanded continuously.

In 1908, the State Board of Health complained about the condition of West Chester's sewers and the local Board of Health was obliged to do something.(55) They called for public support and pointed out that people who traveled in automobiles and carts down the streets of town might not see the reason for a sanitary sewer system, but if people supported the issue, a system could be built.(56) The cellar inspection of 1909 also revealed the need for a sanitary sewer system.(57)

In 1911, the Borough finally passed an ordinance adopting a sanitary sewer system. (58) The following year, an extensive ordinance prescribed the method of construction, size and financial responsibility for the laying of a the new sanitary sewer

system. The pipes connecting the household to the borough sewer pipes under the streets were to be 6 inches wide and made from terra cotta or wrought iron. The licenses for plumbers to work on this system were awarded one year at the time, and 24 hours' notice had to be given to the street authority in West Chester before the street was broken up. There was a lot of building activity in the Borough at this time, and it is easy to imagine the amount of street work that resulted from laying pipes all over town.

There were strict regulations on what was allowed to go into the sewage as well. Early sewers in America were generally large in order to make them easier to clean, so it is fair to assume that the small size of the pipes in West Chester made it necessary to regulate what was being disposed. A fee for the use of the sewer was arranged but the borough paid the cost of laying the pipes and connecting the households to the sewage system.

Connecting everyone to the sewage system took a long time in West Chester. Compared to the rest of the nation, West Chester was late on the sewer issue.(59) In 1939, 39 more houses were connected to the sewage system and 26 still remained unconnected. Where were these houses, and was there a connection between their location and the delay in connecting them? This might not be the case but it would be worth looking into. From interviews done with residents from the Riggtown neighborhood in West Chester, some remember having plumbing put in the 1920s. In the 1940s after the war another Riggtown resident remembered installing a bathroom. Interviewees recalled that a sewer line was laid along East Nields Street in 1928.(60) Apparently it was not done a block at a time, but instead individual houses got connected as needed. The fact that a house was on a sewer line did not mean that it was automatically connected.

Between 1930 and 1941, the number of unconnected houses that were located on sewer lines declined from two hundred to five. The Board was apparently aware at this time that many people did not have proper toilet or bathing facilities, especially in the houses that has been turned into apartments.(61) The Board wanted to make a survey of these conditions, but did not want to pay for them at borough expense. The State Relief Act was considered as an alternative for financing a survey like that.

By 1918, not many cesspools were left since most people were connected to the sanitary sewer system.(62) The ones who were not connected started to complain. Complaints also came when sewage ran into neighbors' yards or empty lots, in which case the Board of Health investigated (63) Cesspools did not disappear from West Chester until much later. According to an article from 1951, cesspools from a new development (Suburban Village) in East Goshen leaked into a small stream that ran into a lake at Fern Hill, which served as a source of water for West Chester. In the 1950s, houses with no bathrooms or baths were not that unusual.(64) The problem with new developments that were outside the jurisdiction of the West Chester Board of Health was that the State Board of Health did not yet specify a sanitary building code for new developments in the counties. (65) In 1956, the Board of Health recommended a new building code where sanitary plumbing, and various other aspects like lighting and ventilation were strictly regulated.

(Author's note: It would be interesting to find out where the sewer lines were laid first and if there were certain neighborhoods that were more of a concern than others when it came to sewers and cesspools.)

c. Cellar Inspections

Cellar inspections were important and useful systematic sanitation surveys that mapped out the sanitation dangers and needs for the town.(66) The Board of Health did not initiate these inspections but it intensified them, especially after 1893 when the new Board took more aggressive measures to create a healthy and clean town. At first, cellar inspections were serious matters that enforced the Board's strict regulations. Later on in the twenties and thirties, it became more of a spring cleaning project that citizens were urged, not ordered, to take part in.

In the 1860s (possibly earlier) and until the Board of Health was created, the Sanitary Committee (composed by Borough Council members) made rounds on a certain day once a year to check that everyone had whitewashed their cellars, removed their garbage and ashes, and that the cesspools were in order.(67) In 1885, when the Board of Health of West Chester was created, the police was assigned to supervise the cellar inspections.(68) The citizens of West Chester had ten days to comply with the rules and whitewash and clean their cellars and clean out their water closets. Some considered this a very short time.(69) People were very helpful, the newspapers reported, and they thought that the typhoid epidemic in Plymouth might have had something to do with the cooperation.(70) After 1893 the Health Officers were given more power to enter each property and business.(71)

The cellar inspections in the first decade of the 20th century were very thorough. Police officers inspected each house and kept detailed reports that the Health Officer turned in to the Board of Health. The cellar inspections started out as an annual event, but some sources refer to them as biannual as well as triennial.(72) The Police officers were each given a district, and in 1907, they had to visit 2400 houses. The sanitary conditions at each property were noted, as well as how many people lived there, if there was any dogs or animals, and if the cesspools and cellars were in good condition. This was truly a systematic health survey, and the cellar inspection was used for collecting other information. For example, in 1909 officers who performed the inspection made a dog census which was given to the tax collector to use for the dog tax.(73)

The cellar inspections had a kind of neighborhood feeling to them. In one article the neighborhood householders are urged by a friendly reporter to have "their pastry under surveillance" during the inspections since many police officers were good pie eaters.(74)

There were some objections as well. Some claimed that municipal inspections were unnecessary since "My cellar is clean; you need not send anyone to examine it. But I am not responsible for the condition of an alley" according to one West Chester resident who was quoted in an article that suggested many others felt the same way around town.(75) "A thorough sanitary inspection of private properties has in former years insured to the public good, and caused no great hardship to fall on any citizen. As thorough a municipal inspection by our borough authorities, it is claimed, will also be beneficial to the health of the town in making it still a more

pleasant place to live in" one reporter wrote in 1909. He suggested that the rules of the health ordinances be clearly posted and strictly followed, and violators be arrested for breaking those rules. (76)

The newspapers printed the results of the cellar inspections as well as short anecdotes, names of owners and addresses of properties that did not pass or that showed an extraordinary cleanliness. In spite of some complaints, most people seemed to welcome the officers.

In 1923, the cellar inspection was called "spring clean up" which pretty much asked the same thing of people without the strict instructions. A week in May was named "Spring Clean-up Week" statewide, and citizens were asked to be part of making the borough beautiful and extra garbage removal was available.(77) In earlier days the people who did not comply were punished, as someone wrote fifteen years earlier, "The Board of Health means Business."(78) It would be interesting to see what exactly constituted this change. There were 2500 houses in West Chester in 1909, and there were no doubt more in 1923. The "Spring Clean-up" still involved inspections, but it seems to be more of a general clean up where people were encouraged (not ordered) to fix gutters, clean out winter waste in order to prevent the spread of disease and the breeding of mosquitos. The tone was more pleading "Help us make our city clean and healthy" was more of the sentiment rather than "You better to do this or else..."(79)

d. Animals in Town

There were a lot of animals present in West Chester and the amount of waste from establishments that either kept or killed animals must have been enormous. Any place that kept animals such as pigs, horses, cattle and every slaughterhouse had strict rules to follow when it came to the disposal of waste and the cleaning of the premises.

The only establishments that did not produce a lot of complaints were stables. Horses were the main means of transportation, but also a great culprit when it came to unsanitary streets. (80) There was not very much written about horses and sanitation in the

newspapers I researched. The complaints were mostly about smells from the stables which the Board of Health did not consider dangerous to the health and did not act upon.(81) But the fact that horses were so important to the town might be the reason for the lack of complaints. Pigs were useful for garbage disposal but for that purpose they did not need to be in the borough. Horses however needed to be in the borough, and to suggest that stables be taken outside the borough limits would have most likely provoked opposition.

Pigs were crucial to the town as garbage eaters, but pigsties posed a health risk, especially in the summer. "Nice to have - Pig pens and slaughter houses in the heart of the borough during the heated term. Board of Health where are you?" a resentful citizen wrote in 1821.(82) In the latter part of the 19th century, pig owners were ordered o take their animals out of the borough every summer by a specific deadline. (83) I am not sure where they went, but perhaps farmers outside of the borough charged a fee to keep the pigs over the summer or maybe people just stopped keeping pigs? After 1911, pigs could no longer be kept within borough limits without the permission of the Board of Health, and apparently the pig owners respected this judging from the lack of articles about any problems with this. Well, except for the case of the defiant little pig that was discovered in 1918 in his sty in the middle of town. A reporter writes "It was a tiny innocent piglet, so to speak, and was in a cozy clean sty, and entirely unaware that pigs are not, under the ordinance made and provided, allowed to reside in West Chester." The Board of Health was notified but I could not discover the fate of the pig. Usually the Board of Health's decisions were taken seriously, but as this exmaple shows, but there were times when the Board's radical measures and the strict methods were ridiculed.

Rabid dogs were also a concern. Ordinances since the 1820s, requiring dogs to wear collars, were concerned with controlling loose dogs and preventing rabies. (84) The Board of Health issued a quarantine on dogs in 1942 due to rabies in the area. (85) However, this was a small project of the board. By this time, their concern was centered more on farm-animals and farm produce. Cows became the favorite targets of the Board of Health

after milk inspections became their main focus in the forties and fifties.

e. Contagious diseases

The most radical actions the Board of Health took were in regards to epidemic and contagious diseases. To control disease was, after all, the initial reason it was created. The methods they used might seem somewhat harsh, but it is important to remember that the reality called for them. The diseases declined in West Chester over time, and the number of quarantines went down. (86) The reasons for that are many, but vaccinations, better sanitation, and strict enforcement of quarantines played a big part in that, in my opinion, all of which the Board of Health supervised.

From the very beginning the purposes of the Board of Health was to get control over the contagious diseases that repeatedly threatened West Chester. This was why Boards of Health were created on a state and national level as well.(87) From the very start, the Board of Health kept track of births, deaths and cases of communicable diseases in the borough.(88) There were also reports on the general health of the town from early on. "There is no sign of cholera" wrote one reporter in 1821.(89) (Author's note: This is something that we are fortunate not to have to write about. Instead today we report on the ups and downs of the stock market or the weather. I can easily imagine that if television been available at the time, that there would be an "epidemics report" right after the weather report.)

Everything the board did was aimed at reducing the risk of disease in the town. The strong measures that characterized the Board's strategy on contagious disease control were established by an extensive ordinance after the reconfiguration of the Board of Health in 1893. A list of diseases that was considered "communicable and dangerous to public health" was included in the ordinance including "small-pox (variola, varioloid), cholera (Asiatic or epidemic), scarlet fever (scarletina, scarlet rash), whooping cough (diphtheric sore throat), typhus fever, spotted fever (cerebro-spinal meningitis), relapsing fever, epidemic dysentery and leprosy." All these were objects to the following laws:

- As soon as a person had one of these diseases, someone in the household had to immediately report it to the Board of Health, giving the address were the person lived.
- If a doctor examined a patient with one of these diseases, he had to report it immediately to the Board of Health, who then informed every school, academy, and kindergarten to release any students connected to this patient.
- Persons or items that had been in contact with the sick person could not be removed from the household unless the Board of Health permitted it. Members of the household were not to mingle in public places such as church or school.
- If someone died of one of these diseases, no public funerals were to be held. Funerals were to be as small as possible and the name of the disease the person died from had to be noted in any public notice of their death.
- The room that the person lived in could not be lived in or let until it had been satisfactorily disinfected. Any clothing or bed clothing must be disinfected.
- Anyone that had not been vaccinated for smallpox or had been exposed to cowpox regularly had to be vaccinated within six months of the ordinance date. If someone could not afford it, the Borough paid for vaccination as long as a proper bill, not exceeding 50 cents, was submitted.
- Cemetery workers and undertakers had to take the proper precautions when burying someone with any of these diseases. A burial permit had to be issued by the Board of Health. Also no dead body whatsoever could be exhumed between the months of May and October.

In 1907, another ordinance about communicable diseases was published. It dealt with the importance of physicians reporting disease according to a very distinct system of reporting. It specified in what situations the report went straight to the secretary of the Board of Health and when it went straight to the State Department of Health, amongst other things. The diseases that needed to be reported were listed (a longer list than in 1893) and included yellow fever, scarlet fever, bubonic plague, anthrax, spinal meningitis, dysentery, measles, smallpox, mumps, yellow fever, malaria, certain tuberculosis, whooping cough and more. If a doctor failed to report one of these diseases, that fact also had to be reported to the Board of Health.(90) In 1909, there were complaints that cases of whooping cough were not being reported to the Board.(91) I believe that doctors might have felt obliged to report things they were not sure about, in order to be in compliance with the health laws.

8. The Pest House

The need for a contagious ward was very obvious and seems to have surfaced seriously in the beginning of the 20th century.(92) G.E. Woodward, Secretary of the Board of Health, commented in 1901 on the need for the creation of a contagious ward since smallpox was closing in on the county. The article mentioned his concerns about newcomers that has been in contact with smallpox or who had received goods shipped to them from "contagious" houses." The contagious ward needed to be located away from the water [he mentions a lake in the woods] and more than one building. "There should be a place for those who can pay and one for those who do not pay. But then, why should West Chester be under obligation to make preparation for those who do not pay? The burden for caring for them is on the County and not on the town. I hear also that they have refused to take smallpox patients at the County Home." (93) Various precautions were taken during this time. In Tredyffrin Township, a "pest house" was established in the woods on the land of William Davis where previously a "colored" family lived. The Directors of the Poor in the various townships in the county wanted permission to send their smallpox patients there that year, and a hearing was held. A doctor and a nurse were paid by the county to take care of patients.(94)

In West Chester, A.D. Sharpless offered one building in his brickyard, his old office, as a contagious ward. Borough Council inspected the building and found that it was a good distance from other buildings. It had four rooms, so they could use the two rooms on the bottom floor as home for the nurse and doctor during the quarantine and a kitchen. On the top floor, they could fit in nine male and nine females, altogether eighteen patients. There was a good well and the distance, 100 feet or more to the nearest neighbors, was satisfactory. It was however, unsightly, a reporter wrote, since it was covered in tar on the outside and all black.

The Borough signed a contract for approximately three and a half years with A.D. Sharpless to use the building as a contagious ward when needed. The contract stipulated that if the Borough did not use the building as a hospital, they were to hand it back over to Sharpless in April 1904 and all repairs made should be at Borough expense. If it was used as a contagious hospital, it was to be burned down and Sharpless compensated two hundred dollars. The "Pest House" in the Sharpless brickyard was repaired and various furniture, bed linen and even a bathtub were donated to it. It seems the citizens of West Chester really tried to make it a comfortable abode. Coal and wood were brought in, and it was furnished, equipped and made ready for the first patient. (95)

There is some mention of "colored" citizens complaining about the placement and one has to wonder what motivated the town to place this building at that location. It seems that the inhabitants of "Mud Row" were the closest. (96) (Editor's note: "Mud Row" was located along S. Bolmar Street below Market Street.) At community meetings, residents felt that it had done great harm to their neighborhood and that it was bad for business. The colored community spoke out as well as the other citizens in that area, at a citizens' meeting in December. (97)

A contagious ward was added to the Chester County Hospital in 1902. The ward was closed off, fumigated, and disinfected in between patients. The cost for the patients was paid by the township from where the person came. (Author's note: There is a lot of information in the form of borough financial reports in the newspaper clippings collection at CCHS. In the Chester County Hospital section, the founding and financing of the hospital is easy to follow as well. This would be another interesting and important topic to research.) At first the people around the hospital didn't complain, but soon enough there were meetings held and people voiced their concern. Here we see citizens in the more central West Chester saying "There is no need for this building as a small building in a more remote section will answer all purposes for years to come. The building now used [the Sharpless pest house] answers all requirements. We do not want our fair section of West Chester damaged by any such building..." P.M. Sharpless, a prominent resident of that part of the Borough, was rumored to have desired to remove himself from the area and build another house somewhere else, but when asked about it, he claimed that the hospital management compromised and moved the site of the ward away from his property, and as they promised not to take any serious cases into it, he felt satisfied by that. It is obvious that these opinions mattered more than those of the neighbors of the Sharpless Brickyard did, yet the contagious ward was still built.(98)

It is unclear how long the pest house was in use. In 1909, after the ward had been closed off for two years, Herbert Johnson from "Mud Row" stole a rocking chair from the building. Many things from the house were stored elsewhere but since the place imposed a certain fear or respect, it seems strange that someone would break in.(99) In any case this tells us that the ward was still standing in 1909.

Evidence on how the contagious ward was used is available from the example of the Schwartz family, who got smallpox. A boy, Meyer Schwartz of 147 East Miner Street was diagnosed with a light case of smallpox on November 2, 1902 after his family's house had been quarantined for a week for scarlet fever, which was the initial diagnosis for him and his sister Leah. As soon as the Board of Health was notified, they called in Dr. Addison May Rothrock who had spent time with a Normal School patient with the same disease all summer, and a nurse from Philadelphia, Miss Cronin, who had been working in Malvern. Dr. Woodward of the Board simply encouraged people of the neighborhood to be vaccinated since the case was a light one, and it seemed not to worry the neighbors too much.

One reporter wrote about the curious crowd that gathered outside of the Schwarz resident: "Benjamin Spriggs, the messenger, a veteran colored man, who had the smallpox long ago, stood on the sidewalk and assured the people that there was `no use in making such a fuss about it. I never felt better in my life then when I just got over it,' said he. His face still showed the pits which were left as an unmistakable evidence for all time that he had passed through the ordeal. "My lands I am not afraid of it. I don't mind a little varioloid," said Melinda Cotton, a well-known colored woman who lives next door. "When they had it on Church Street I washed there twice a week. A woman die from it. Mrs. -----, and I took care of her and laid her out, and it never touched me." The article warned about taking it too lightly, but it appeared that West Chester was able, with help of vaccines and other precautions, to keep smallpox from spreading in the past, and people felt pretty sure that it would not become an epidemic.

Concerning the pest house in the Sharpless brickyard, Burgess John Thorpe wrote: "We are very fortunate in having a place ready for the family...The building which A.D. Sharpless formerly used as an office was fitted up last winter, but we had no use for it then. ... Over in Norristown they made no preparations last winter, I am told, and when the smallpox came they were obliged to prepare a building very quickly, and it cost them a large sum ... We shall give this case every care and the council, of course, will be responsible for every cost."(100)

Chairman Joseph N. Marshall oversaw the preparation of the building the preceding winter, and made sure the place had a stove. Wood was available in the borough stables and there was a telephone line installed in the building already. Some upholstered cots and dishes were purchased quickly for the family. The mother planned to do all the cooking and take care of the family in there. On November 4th Meyer Schwartz, his mother and his two sisters were sent to the Sharpless pest house. The father, Benjamin Schwartz, and three elder sons were excluded from the quarantine since they had kept away from the home for a week. Benjamin Spriggs was in charge of the move and the old wagon that had transported the family and anything else related to the transport was burned. Burgess Thorpe and other officials supervised the transport from a distance.(101)

In general it seemed that everything was done to make the patients comfortable. The whole town seems to have followed the families' recovery. Dr. Rothrock's mother sent two rocking chairs to the house. Mrs. Schwartz friends came and stood 150 feet away from the building and converse with her, the residents of the town sent many items to the house. (102)

In December 1902, the Borough began to construct another building about 100 feet from the original pest house in the Sharpless brickyard. It was intended to serve as the convalescent ward. After recovering somewhat, Meyer moved there on December 18, 1902 and stayed with Dr. Rothrock while his sisters, his mother and the nurse Miss Cronin remained in the first building for a little longer. The convalescent ward was quickly erected with four rooms and a "cozy room" for Dr. Rothrock. The contractor, a Mr. Crawford, apparently threw in some extras and made sure it was a comfortable as well as useful place. (103) Dr. Rothrock later said that the Borough Council had been very generous and given him whatever he asked with no problem. The girls moved to the convalescent ward in the week following the brother's move, and after two weeks (in the first week of January) they were released. The contagious ward was then closed up and disinfected in preparation for the next time it would be needed. Dr. Rothrock commented the one of the children had been vaccinated and still gotten sick, so he advised that vaccination had be redone until the resistance to disease was strong.(104)

In cases where the disease was contagious but not as serious as smallpox, people were quarantined inside of their house for a shorter time. (105) The Health officer fumigated and disinfected the premises. Quarantining of people with

communicable diseases continued through the entire existence of the Board of Health. When an epidemic occured in West Chester, the Board of Health assessed what measures were needed.

The board placarded premises with communicable diseases. In 1942 the Board of Health discontinued the placarding for cases involving measles, chicken pox, mumps, and whooping cough after the State Board of Health had relaxed rules regarding the quarantine of those diseases. However, the local Board of Health reinstated placarding six months later, and continued the practice until 1954 when new rules made the quarantine period for those diseases so short that placarding seemed to be useless. (106) At this time, polio became a concern.

(Author's note: It would be possible to make a detailed comparison of how many quarantines were ordered from the end of the 19th century until the late 1950s by using the clippings files in CCHS. There is a wealth of Board of Health meeting reports and annual health reports in the newspapers, as I mentioned earlier, that would provide numbers for a statistical comparison.)

The fact that we can still find these methods in our health regulations, even if we do not notice them much anymore, means that they are still considered being the best way of dealing with potential epidemics or outbreaks of contagious diseases.

9. Flu Epidemic

In 1918, West Chester had a serious epidemic of Spanish Influenza that tested the Board of Health's methods. The flu spread throughout the State, and in order to prevent the worst scenario, the Board of Health acted fast.

On October 4, 1918 The Board of Health issued a "Strict Quarantine for West Chester." All public gatherings were postponed and schools, churches, and any public entertainment places were closed down. Spitting in the street was even declared illegal and the Criminal Court was closed down. There were no movie houses, poolrooms, soda fountains, public and private schools or railway stations that could stay open. The one exception seemed to be the Normal School, which was allowed to stay open as long as the morning gatherings were not held. In the middle of the month, stores forbade loitering and the sale of ice cream was restricted.(107) The acting State Commissioner of Health, B. Reynolds, sent a telegram to Dr. Joseph Scattergood of the West Chester Board of Health warning about the spreading influenza epidemic in the area. He ordered the Board of Health to declare the guarantine on the town in order to avoid the worst of this epidemic. He also forbade visiting the sick and asked that only the seriously ill be permitted to receive visitors, and then only by relatives.(108) The reason for this radical measure was the flu epidemic which grew rapidly. It was the direct cause of death for 104 people according to the Board of Health's numbers. The number of people who developed serious pneumonia due to the flu was also very high during October and was not included in those death numbers.(109) It was a month-long nightmare. It is probable that had there been no guarantine, the number of dead in town would have been much higher.

Grace Hickman Weaver, who had just turned 18 at the time, remembered that the quarantine forbade young people to leave West Chester. She had a sister in Downingtown and was not allowed to go. There were police roadblocks around West Chester. Pregnant ladies were especially susceptible to the disease, and according to Grace Hickman Weaver and another eyewitness, Wayne Gable, they were the ones that were the most in danger.(110)

The doctors worked overtime and all women with nursing skills were called into the hospitals. Many nurses came down with the disease and there were some casualties. Since it was during the First World War, several local doctors were away on war duty, leading to a shortage of professionals in West Chester and the surrounding area. The New Century Club in West Chester was offered to the Board of Health to act as an emergency hospital, because the armory was already full. This suggests that the quarantine measures were not completely successful since at the onset of the influenza epidemic, it was calculated that there were already 1000 cases in town. That number grew steadily as some hospitals were receiving as much as 50 flu patients a day.(111)

People helped out and the women of the Red Cross in West Chester sewed linen and made pillows for the hospitals. No one appealed to them to fill this need since the quarantine rules prohibited meetings, but they still did it and it was appreciated.(<u>112</u>) The month-long quarantine was finally lifted on November 3rd when the churches were allowed to resume holding services. The public schools were scheduled to open on the Thursday before, but so many physicians and citizens protested to the Board of Health that they changed the opening of public schools to Monday the 4th of November. The Sunday schools opened on the 10th and the public entertainment places on the 5th (except for bars since the 5th was election day and no intoxicating liquids were allowed to be sold on that day).(<u>113</u>)

The actions of the Board of Health most likely saved the town from a worse disaster. The fact that the board had been given the authority to take care of situations like this and had the police supporting them shows us the importance of firmness in their situation. The support for the Board of Health was good during this period. (114) If anything, people were concerned about the rules not being strict enough. After being faced with an epidemic of this proportion it is not hard to understand why.

10. Vaccination

The Board recommended vaccinations frequently, much like the influenza warnings we hear occasionally today.(115) When it came to preventing disease, vaccination was very important. In 1888, a smallpox epidemic in Cuba was reported and nine states declared an epidemic. Delaware had some cases that came from imported rags. The Board of Health called for newcomers and immigrants to be kept under observation for two weeks and vaccinations to be performed.(<u>116</u>) In the Health ordinance of 1893 they ordered each person that had not been vaccinated for smallpox or been exposed to cow pox to get vaccinated. To ensure that poverty did not keep people from getting vaccinated, the borough paid up to fifty cents of the cost if needed.

Doctors since the mid-1800s had been concerned with developing and providing vaccines for smallpox.(117) In 1859 the Medical Society of The State of Pennsylvania had a lecture on their meeting about how to keep a supply of vaccine by injecting it into a cows udder. Still vaccination as a means to defeat disease was not totally accepted in medical circles.(118) One could imagine that inserting a virus into someone in order to make them resist that virus-making someone sick to make them well--might seem like a crazy idea. From the record of The Medical Society of Pennsylvania's 22nd Annual Meeting, June 14th, 1871 one can learn that it was resolved: "That it is the unanimous conviction of the Society: 1st, That the comparative immunity which our country and the civilized world generally now enjoys from the once decimating scourge of small-pox, is due entirely to the protective and modifying influence of vaccination. 2d, That the danger of transmitting other constitutional diseases through the medium of vaccination is so infinitesimally small that it does not deserve to be placed in scale as opposed to the immense benefit which the operation confers." The Board of Health, I am sure, was well aware of developments in the medical field when it came to vaccinations.

Early on, vaccination seemed to be known by regular people as well. Smallpox was very similar to cowpox, a disease carried by cows which produced scabs that appeared on cow udders. It was well known that anyone who had been exposed to cow pox would not get smallpox as all, or else not as bad. Wayne Gabel, a Honeybrook resident born in 1896, described in an interview how, when his father was young in the 1860s and 1870s, a woman from the community took the scabs from a cow's udder and then scratched children's' arms with a little piece of glass and vaccinated them with the cowpox scabs. This would be done any time when smallpox was threatening to come around.(<u>119</u>) In 1902 when the Schwartz family was affected by the disease, Dr. Rothrock, in charge of the quarantine and care of the family, stressed the importance of repeated vaccination against smallpox--the more one was vaccinated the better their resistance.(<u>120</u>)

Schools were considered a hotbed for infections, and in the mid-1890s a law was passed that required school boards to operate as boards of health.(121) In 1902, right before the Schwarz family's onset of smallpox, the State Normal School had a case of smallpox. The school was not required to be guarantined by the Board of Health, and that provoked resentment from some citizens who did not like the idea of the students circulating in the borough, but apparently the case had been away from the school for several days before the outbreak. The Borough Council President was unhappy with the Board of Healths' decision and considered contacting the State Board of Health. In spite of very detailed information on the situation, nothing is mentioned of vaccination, which is interesting since it might mean that all students were vaccinated upon entering the school or that vaccinations were widespread already and not a concern. A school like the Normal School might have been very systematic in making sure that students were vaccinated.

The Board of Health and the school boards took vaccinations very seriously.(122) In 1906 the Board of Health decided that any student enrolled in any school should be vaccinated. The School Board sent a police officer to the home of any sick child to find out what the illness was. There was some resentment among parents who had no choice about paying to vaccinate their children.(123) In 1923 the Board of Health wanted school children in the West Chester to try out a diphtheria serum that was being tested in the whole country. The Schick serum, as it was called, was injected into the arm of the student and was supposed to prevent the disease. I have

not found the results of this trial but it is mentioned that this was successful in other schools in the country.(124)

The biggest health concern for little children in the 40s and 50s was polio. The board made a point of mentioning when there were no cases or few cases of polio, which leads one to believe, justly, that the fear of that specific infection was great. (125) In the case of a polio outbreak, vaccinations were being done as well as quarantining children of a certain age.(126)

f. Milk Inspections and Food Sanitation

The Board of Health became seriously concerned about the condition of milk in West Chester in the forties and fifties. Bacteriological testing became very popular and the milk inspections turned into a crusade that must have caused a lot of discomfort to the farmers. The fear of epidemics, except for polio, had diminished and the sanitary sewer system was in place. Milk inspections became the new main topic of the boards meetings.

Adulterated milk was an early concern in West Chester and Pennsylvania. Physicians in the 1870s identified adulterated milk, as well as filth, as the main causes of Typhoid.(127) An article by Dr. J. Cheston Morris in 1886 suggested that adulterated milk was the cause of death of many infants in West Chester, and called for a milk inspector. (128) Concerns about milk and food were raised by the Board of Health, but nothing major seems to have been done. In West Chester, the inspection of food and milk was sporadic, as other issues seemed to take up most of the Board's attention. But in 1908, the milk supply was the most important issue to come before the State Board of Health.(129) In the twenties, the call for milk inspections was stronger, and in 1923 the local Board of Health presented a Milk Inspection ordinance to the Borough Council. Council voted it down in spite of support for similar ordinances across the state.(130) The Board of Health sent a representative to Harrisburg to a State convention of Health to discuss milk inspections in towns and continued pushing for inspections.(131)

Throughout the forties and fifties bacteriological testing of milk and licensing of milk dealers was a major part of the Board of Health's work, and their progress was duly noted and reported in the newspapers.(132) The Board was even concerned with the cleaning of returned milk bottles and warned housewives against keeping the empty bottles outside on the steps for too long before the milkman came.(133) In 1947, an ordinance regulating every conceivable detail of milk production was published, covering pasteurized milk, licenses to sell milk, buttermilk fat level, and storage temperatures. The Board also suggested to the Borough Council that the sale of any kind of raw milk in West Chester be prohibited (Author's note: I could not find out what happened with that suggestion). If the bacteriological count in the milk was too high, or some other test failed, the milk dealer was called before the board to explain himself and receive a chance to fix the problem. In 1951 the annual Board of Health report state that if the tests failed "changes were suggested to the dairies."

I found a very different view of the milk inspections in an interview from the Chester County Library Oral History Project, with Leon G. Woodward, a farmer born in 1885 in Kennett Township. He spoke about the Board of Health from his area, but the events he described are still interesting enough to be a part of this paper. Also, it is fair to presume that the developments in West Chester would not differ too much from the surrounding municipalities on a matter as universal as milk inspections. Besides, the West Chester Board of Health took direction from the State Board of Health, just like other local Boards of Health.(134)

Mr. Woodward claimed that he lost all his cows when the Board of Health started testing for tuberculosis around the early twenties. All his cows were condemned and bought by the board for forty dollars each (when lower quality milking cows cost seventy-five dollars each) without him having a say in it. They were taken down to a slaughterhouse, killed, checked for disease and then sold for food. He said that they tried to explain why the cows were good for food but not good for milking, but they could not make him understand. He also talked about milk pasteurization and how he never worried too much about it since the dealer was the one who had to do it. But in the thirties, the Board of Health came around and told the farmers they could not cool their milk in spring houses or spring water anymore, but needed to get electric cooling systems. "The Board of Health kept on fighting and

carrying on [saying] that [it] was unhealthful and the townspeople would get sick if they drank it and all this until finally it got along so pretty near every farmer, I guess, complied with the regulation. Some plain did not want to be bothered with the regulation and quit." After the war [Second World War], he said, the Board of Health got more powerful and they wanted farmers to rebuild their barns. "No matter how you had your barn fixed it never suited the Board of Health." By the time a farmer built the milkhouse and put the cooler in, he said, the board required a bigger or better-lit milk house and there was no end of the demands. He said that the farmers had to get rid of the woodwork and put cement floors and iron bars in their barns, which caused the cows to get sick from lying on the cold floor and they milked less. According to him, there was a lot of resentment towards the Board of Health among the farmers but never any organized opposition. The farmers saw the measures as unnecessary and he himself said that he never drank milk any other way than the way it came from a cow. "But of course the Board of Health and the doctors that were in the Board of Health they always had a lot of big write-ups about it in the paper. How much better the milk would be, how much better it would sell."(135)

This account might not be representative of all the farmers in the area, but looking at the aggressive stance the West Chester Board of Health and probably other boards in the area, it is more than likely that these sentiments could have been found elsewhere at this time. This would be a very interesting research topic to find out how many farmers gave up farming partly or entirely due to the measures of the Board of Health in the area, and how the changes were, as the Board of Health stated in 1957, "suggested" to the dairy farmers.

Food and restaurants were also regulated and inspected by the Board of Health. The Pure Food and Drug Act of 1906 was the first indication on a national level that the quality of food was taken seriously. In the 1910s the act was amended several times to eliminate loopholes and in the 1930s it was amended again to be even more strict.(<u>136</u>) At this time the board regulated the quality and freshness of local grocer's produce as well. In 1908 the West Chester Board of Health inspected two Hokey Pokey (ice cream) manufacturers in West Chester.(<u>137</u>) This was not a systematic inspection--the Board just decided that it would not hurt to inspect the plant since many children ate the ice cream. After this, every new manufacturer of Hokey Pokey ice cream was to be inspected.(138)

In 1918, a typhoid epidemic caused by a Hokey Pokey ice cream vendor began, according to Catherine Mason who was born in 1896. She bought Hokey Pokey ice cream for her friend who became sick with typhoid fever and died. The health officials could not figure out what caused the ninety typhoid cases in the West Chester area, so they tested all the hokey pokey vendors until they finally found one man who carried the virus but did not have the disease. Catherine got sick herself and she that many children died because their mothers did not keep them on a strict liquid diet.(139)

In West Chester, the first organized action regarding food and restaurants taken by the board was in 1912 when they began to insist that anyone selling food or produce had to make sure it was not exposed to dogs, insects, vermin or filth.(140) In 1915, an ordinance was approved that prohibited people with certain diseases from selling or serving food. In 1922 that ordinance was amended to require that a vendor produce a certificate of health issued by a doctor in order to receive a six-month certificate for vending.(141) The issuance of these health certificates was published along with the Board of Health's annual report.(142)

5. Conclusion

The West Chester Board of Health did succeed in making West Chester a healthier place to live. Many people contributed to their success, but in the end the members of the board had a big part in reducing health risks and organizing sanitation and public health efforts locally. Piece by piece, they created the web of laws and regulations that as a whole represents a systematic approach. The history of the Board of Health is more than garbage, cesspools, sewers, and vaccines. It is the story of how local government dealt with urbanization and how town politics worked. It is also a window into people's everyday lives, and the reality they knew. Together with other histories about West Chester, it creates a more complete and comprehensive history that gives us a multifaceted account of a town and the people in it. Whether they had the public support is less clear. At times when there was threat of epidemics, they were supported, as was the case in 1918 during the flu epidemic, and in 1902 during the Schwartz family smallpox quarantine. I feel that people relied on them and even if they would sometimes got irritated with the methods they use they realized that it was necessary. The case with the farmers was somewhat different. The Board seems to have disregarded farmer's situation on their crusade to reform dairy production. I have to wonder if the aggressive measures really were needed. To study any debate that might have been going on over the milk inspections would be interesting. There might well have been a thought behind putting a farmer as a member on the Board of Health in the 1940s.

Interesting questions surfaced during my research. I have mentioned some of them throughout the paper, as it seemed appropriate. The effect the Board of Health had on farmers is one interesting subject. Since the Board became responsible for issuing licenses and contracts for various professions and businesses, it could be interesting to establish who was awarded licenses and who was not, and how it was decided who would get a sanitary plumbing contract or a garbage collecting contract. Were there any scandals, bribery, or nepotism? Another interesting topic would be to find out more about the awareness of regular people when it came to reform movements and advances in the medical and scientific field. What did the residents of West Chester think of the health laws that were issued? How did people perceive these upper middle-class men that told them what to do and not do with their properties and streets? I have touched on this somewhat in this paper and I feel that it would be important to study further.

Finally I would like to acknowledge the excellent help I have received from the Chester County Historical Society's Research librarians and volunteers as well as the advice and useful directions that the Chester County Historical Archives' staff provided me with. These people are resources in themselves and are invaluable to any researcher.

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Woodward, Leon G., interviewed by Nicolette Myer, tape recording and transcript. 27 March 1978. Chester County Library Oral History Project. West Chester. PA.

1. The Chester County Oral History Project is available on tape and on transcript in the Chester County Library in Exton in the Reference section under Chester County History.

2. Chester County Health Department Rules and Regulations available at the Chester County Library reference section.

3. *Daily Local News*, January 21, 1885; March 14, 1885, in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Board of Health For future reference: Unless otherwise specified, any newspaper articles in these notes can be located in the Chester County Historical Society (henceforth CCHS) in the news paper clippings files under West Chester Public Offices: Board of Health

4. Donald A. Kruckeberg, ed., <u>Introduction to Planning History in the United</u> <u>States</u>, (New Brunswick: Center for Urban Policy Research at Rutgers University, 1983), 15.

5. <u>History and Progress of Chester County</u>, (The Commissioners of Chester County, 1967) available in the Chester County Library reference section. I have been in contact with Borough and County Authorities, which have not been able to assist me in finding out what exactly, happened with the Board of Health. However, I found it possible that the Chester County board of Health, which had five members more than likely is the very same Board that was asked to prepare for a Department of Health.

6. Kruckeberg, 14. "Filth Theory" meant that filth was seen as either the direct cause of what we now know as contagious diseases or something that made contagion spread faster. Stagnant water, sodden ground, lack or air and sunlight were considered causes of disease as well. The diseases that were considered being related to filth were typhoid, typhus, scarlet fever, and

diphtheria. These theories on filth called for a systematic large scale reshaping of the cities, which became the beginnings of city planning.

7. Raymond A. Mohl, <u>The New City: Urban America in the Industrial Age</u> <u>1860-1920</u> (Illinois; Harlan Davidson, Inc, 1985), 174. Advances in science and medicine, particularly the discovery of the germ theory in the 1880's, authoritatively linked contagious disease to environmental conditions. At the same time new technology provided the mechanism for reform. ; Ellis L. Armstrong, ed., <u>History of Public Works in the United States 1776-1976</u>, (American Public Works Association, Chicago, 1976), 237. The Germ Theory of disease which was first announced by Louis Pasteur in 1857 and more firmly established by Robert Koch in the 1870's

8. *Jeffersonian*, July 29, 1821. A board of Health was created in Philadelphia in 1795; Howard Kistler Petry, M.D. ed., <u>A Century of Medicine 1848-1948:</u> <u>The History of the Medical Society of Pennsylvania</u> (Harrisburg: Medical Society of the State of Pennsylvania, 1952), prefatory note.

9. Armstrong, 433-434 Most colonial tourist sites does not tell the tourists about the Heaps of garbage lying about the streets and odors of decaying refuse close to even the most elegant homes were not uncommon. Nor were the dozens of pigs squealing through unpaved streets in competition with dogs. Rats. And vermin-all busily rooting through the wastes for a meal. Charles Dickens wrote, after a visit to New York City, about he amounts of pigs and scavenging animals in the street of the city. Sometimes laws were made to protect some of those animals, like carrion-eating vultures.

10. *Daily Local News* 1860-1870 During this time issues like getting the pigs out of the city and cleaning out the pig pens are frequent in the Board of Health's reports

11. Daily Local News, July 11, 1879; September 7, 1878; May 26, 1884

12. Village Record, April 10, 1866; May 11, 1866

13. Kruckeberg, 23; Petry, 30.

14. *Daily Local News*, January 21, 1885; September 7, 1878; Village Record, May 11, 1866

15. Daily Local News, 21 January, 1885

16. *Daily Local News*, June 6, 1900 Woman is a natural born sanitarian a Dr. Lee was quoted saying on a Board of Health meeting about school hygiene; Armstrong, 437

17. Petry, 4-5

18. lbid., 65; 70; 73

19. Daily Local News, June 14, 1893

20. Ibid.

21. Daily Local News, August 3, 1893

22. Daily Local News, December 7, 1893,

23. Daily Local News, October 18, 1893; October 7, 1893,

24. Daily Local News, November 22, 1893,

25. Daily Local News, March 14, 1885; April 24, 1885; September 25, 1891

26. *Daily Local News*, May 8, 1918; June 6, 1923; March 6, 1909; June 29, 1909; September 5, 1923; June 29, 1909

27. Daily Local News, June 28, 1894

28. Armstrong, 447. A survey conducted by the Massachusetts Institute of Technology at the turn of the century shows that at this time 45 cities deposited refuse on land, nine burned it in dumps, 18 plowed it into the ground, 14 dumped it in the water, 41 fed it to stock, 27 incinerated, 19 employed reduction processes, 11 used irregular methods. 20 years later American Society of Municipal Improvements collected information on some 200 cities and found that things had barely changed. See Page 449 for a description of the garbage disposal methods of municipalities the size of West Chester.

29. Daily Local News, July 16, 1888; September 7, 1878; Kruckeberg, 15.

30. Daily Local News, March 14, 1885

31. Daily Local News, June 29, 1886

32. Armstrong, 438. Horse drawn wagons with brushes would clean streets in American cities in the late 19th Century. Horse drawn carts would collect waste.

33. Daily Local News, October 7, 1893 I couldn't find the result of this venture.

34. Daily Local News, June 29, 1909

35. *Daily Local News*, December 12, 1906 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

36. *Daily Local News*, September 1, 1907 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

37. Armstrong, 435. A detailed description of machines like this can be found here.

. *Daily Local News*, May 3, 1900 The article describes the procedure of incinerating garbage in detail.) Apparently the initial cost was very high even if it was recommended as the best method of garbage disposal available. It was mostly an 38alternative that was viable to larger cities.

39. Armstrong, 448. Feeding hogs garbage brought income to Municipalities. Up until the 1940's a large percent of municipalities fed their organic wastes to hogs. There were health risks involved such as Cholera and trichinae infection. In the 1950's new laws that required wastes to be thoroughly cooked before fed to hogs and killing of large amounts of stock due to health risk brought the percentage of municipalities that used this as part of the waste disposal down. In the 1970's only 4 percent of smaller municipalities used this method.

40. Daily Local News, July 16, 1902; July 27, 1902

41. Armstrong, 434.

42. West Chester Star, November 5, 1913; December 3, 1913

43. Daily Local News, October 30, 1945,

44. *Daily Local News*, January 10, 1947; February 2, 1949 In 1947 the Board of Health is still fighting to get an incineration plant for garbage erected. In October 1947 they sent suggestions to the Borough Council about forbidding the burning of garbage within the borough limits except for on the dumps and the for the erecting of an incinerator for burning garbage. Two years later still the incinerating plant was one of the primary concerns of the Board of Health.

45. Armstrong, 448.

46. Ibid., 449. For insight into the decisions of smaller municipalities not to get incinerating plants

47. *Daily Local News*, April 21, 1885 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

48. West Chester Star, November 5, 1913

49. Petry, 66.

50. Daily Local News, May 1, 1885

51. Kruckeberg, 17. In 1842-1844 Edwin Chadwick, prominent English sanitary reformer, envisioned a city with smaller sewer pipes and constant flowing water in place of the large sewer systems designed for a man to be able to go in and clean out animal carcasses or large debris. A small sewer system would clean itself he thought. The sewers would be designed that same all over the city and would work with gravity in transporting the water and debris. Streets should also be paved and waste and dirt washed down into the sewers before it could decompose and cause disease. Chadwick's water carriage sewer system was taken up by American sanitary reformers. Even though before 1890 a total conversion of a city's sewer system to a water carrier sewer system was only done once, the water carrier sewer system took root in America after the civil war.; Armstrong, 400-403 For a description of various sewers used in the 18th and 19th century.

52. Daily Local News, June 3, 1901, July 10, 1909

53. Daily Local News, September 20, 1902

54. *Daily Local News*, September 20, 1901 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

55. *Daily Local News*, May 23, 1908

56. Daily Local News, July 10, 1908,

57. Daily Local News, July 10, 1909,

58. *Daily Local News*, September 10, 1912, in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

59. Kruckeberg, 15. In the 1880's sewer installations became more planned and not only a piece by piece addition. See also Mohl, 174-176. In the early 20th Century sewage and water treatment plants were established. "By 1907 virtually every American city had installed sewers. By the progressive era, most big cities were using filtration and chlorination to assure pure water supplies;" see Armstrong, 402- 403.

60. Interviews with Riggtown residents Dorothea Parker; Charles Carey; Pat Morley, interviewd by Dr. James Jones, transcript, 16 September 1996.

61. *Daily Local News*, January 16, 1940 This was inspired by a National building Code created by the National Board of Fire Underwriters.

62. Daily Local News, May 8, 1918

63. *Daily Local News*, April 8, 1918 An owner less lot between Sharpless, Nields and Darlington Streets had sewage running in to it and the problem of correcting it was that of whose authority if came under. In the end the State Board of Health was called upon to make a decision in the matter.

64. Daily Local News, January 29, 1957

65. Daily Local News, February 15, 1951

66. Kruckeberg, 23-25. The yellow fever epidemic spread in the lower Mississippi valley and in Memphis alone 5,150 people out of 45, 000 died. In 1879, Congress created a National Board of Health and when yellow fever returned to Memphis in the following year, the Board of Health was urged to come up with a thoroughly and systematized and comprehensive plan with which to attack this problem. Sanitary surveys mapped out the cities' sanitary needs and the health risks involved, and this became in itself a kind of city planning. 67. *Village Record*, April 10, 1866 and May 11, 1866; *Daily Local News*, January 21, 1885

- 68. Daily Local News, March 14, 1885
- 69. Daily Local News, April 24, 1885
- 70. Daily Local News, May 1, 1885
- 71. Daily Local News, May 4, 1894
- 72. Daily Local News, June 5, 1907.
- 73. Daily Local News, May 27, 1909
- 74. Daily Local News, July 23, 1909
- 75. Daily Local News, June 3, 1909
- 76. Daily Local News, May 28, 1909
- 77. Daily Local News, June 6, 1923; April 11, 1923
- 78. Daily Local News, May 27, 1909

79. *Daily Local News*, June 6, 1923; 11 April, 1923; 20 April, 1922; 27 May, 1909; 10 July, 1909

80. Armstrong, 434. For further information on just how much of a polluter the horse was.

81. Daily Local News, January 10, 1901

82. Jeffersonian, July 29, 1821

83. *Daily Local News*, May 26, 1884 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances; *Daily Local News*, 1860-1870; Daily Local News, May 1, 1885

84. *Daily Local News*, in Chester County Historical Society's Newspaper Clippings Collection: West Chester Public Offices, Ordinances

85. Daily Local News, March 15, 1918

86. I came to this conclusion by looking at the reports of the Board of Health printed in the *Daily Local News* from 1885 - 1957. A more detailed analysis should be made, but it is obvious that the numbers of contagious diseases in general, with the exception of an occasional small outbreak, went down during the existence of the Board of Health.

87. Kruckeberg, 25. See also *Daily Local News*, April 10, 1886. Several articles mentioned that a National Board of Health was created in Washington D.C. after the yellow fever epidemic in 1878 and was approved by congress on March 3, 1879, and that the Board of Health (West Chester) wants more power to act.

88. These reports were printed in the newspapers on a monthly basis, as well as when the individual cases of disease would occur.

89. Daily Local News, August 5, 1854

90. Daily Local News, February 6, 1918

91. Daily Local News, August 3, 1909

92. *Morning Republican*, February 17, 1897 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Institutions, Chester County Hospital

93. Daily Local News, November 29, 1901

94. Daily Local News, December 6, 1901

95. *Daily Local News*, December 6, 1901; December 16, 1901; December 20, 1901; December 17, 1901

96. Daily Local News, December 17, 1901

97. The little I could read about this is in the Board of Health clippings collection in the 1901 section. I found the article underneath the larger article from December 17, 1901, but unfortunately neither the date nor source was indicated. It was most likely from late 1901 or early 1902 and probably in the *Daily Local News*.

98. *Daily Local News*, November 22, 1902; July 6, 1902; June 30, 1902; November 6, 1902 in Chester County Historical Society's Newspaper Clippings Collection: West Chester Institutions, Chester County Hospital

99. Daily Local News, February 13, 1909

100. Daily Local News, November 2, 1902; November 4, 1902

101. Ibid.

102. Daily Local News, December 11, 1902, November 19, 1902

103. Daily Local News, December 17, 1902

104. Daily Local News, November 12, 1902

105. *Daily Local News*, July 8, 1902; July 7, 1902; July 5, 1902 In another case--that of Horace Temple, whose household was quarantined because of diphtheria-- the quarantine was done in the home and was shorter than that for smallpox. After fumigation and a thorough check, the quarantine was lifted fairly quickly.

106. Daily Local News, February 22, 1954

107. Daily Local News, October 14, 1918, October 7, 1918

108. Daily Local News, October 5, 1918

109. Daily Local News, November 5, 1918

110. Grace Hickman Weaver, interviewed by Nicolette Myer, tape recording and transcript, April 6, 1978, Chester County Library Oral History Project, West Chester, PA.; Wayne Gable, interviewed by Nicolette Myer, tape recording and transcript, November 4, 1978, Chester County Library Oral History Project, West Chester, PA.

111. *Daily Local News*, October 8, 1918; October 5, 1918; October 9, 1918; October 12, 1918; October 7; 1918

112. Daily Local News, October 10, 1918

113. *Daily Local News*, October 28, 1918; October 30, 1918; November 1, 1918; November 3, 1918

114. Daily Local News, October 5, 1918

115. *Daily Local News*, February 2, 1949. In 1948, West Chester had an unusually high amount of contagious diseases and there had been a small epidemic of diphtheria in another part of the county. The Board felt that there was cause to stress the immunization of babies and your children.

116. Daily Local News, March 31, 1888

117. Petry, 30.

118. lbid., 37.

119. Wayne Gable, interviewed by Nicolette Myer, tape recording and transcript, November 4, 1978, Chester County Library Oral History Project, West Chester, PA.

120. Daily Local News, November 12, 1902

121. Daily Local News, June 6, 1900; Petry, 94

122. Daily Local News, April 7, 1906

123. *Daily Local News*, April 6, 1906. This article criticized the way vaccinations were performed in schools because parents had to pay the cost and police officers came to the house to find out if a child that is not in school is sick. The author was critical of the State Vaccination Fund and the fact that people were expected to support it.

124. Daily Local News, April 30, 1923

125. Daily Local News, February 9, 1950; February 22, 1954

126. Daily Local News, June 17, 1955

127. Petry, 60

128. *Daily Local News*, February 18, 1889 on Microfilm in Chester County Historical Society. The author claimed that 200 to 300 children died from consuming adulterated milk.

129. Daily Local News, April 23, 1908

130. Daily Local News, June 6, 1923

131. Daily Local News, December 5, 1923

132. *Daily Local News*, January 16, 1940; February 2, 1940; January 15, 1942; October 30, 1945; April 14, 1956

133. Daily Local News, November 13, 1942

134. Leon G. Woodward, interviewed by Nicolette Myer, tape recording and transcript, March 27, 1978, Chester County Library Oral History Project, West Chester, PA.

135. Ibid.

136. <u>The People's Chronology</u> Henry Holt and Company, Inc, Microsoft Bookshelf CD-ROM, (Columbia: Columbia University Press, 1993)

137. *Daily Local News*, June 11, 1908 Ice cream manufacturers James Ricco at 320 West Chestnut Street and Salvatore de Renzi at 418 Hannum Avenue were examined

138. Daily Local News, June 11, 1908

139. Catherine Mason, interviewed by Nicolette Myer, tape recording and transcript, February 1, 1978, Chester County Library Oral History Project, West Chester, PA.

140. West Chester Star, September 10, 1912

141. Daily Local News, April 11, 1922

142. Daily Local News, January 16, 1940; January 29, 1957