PUBLIC HEALTH SURVEY
CITY OF HILLSBORO OREGON
STATE OF OREGON
MADE BY GRAEME H. STRICKLAND
F ROM

1932
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Hillsboro is located 18 miles west of Portland on the Tualitin Valley Highway. The U.S. Census for 1920 shows a population of 2466, while the 1930 census shows a population of 3039 thousand. The percent of foreign born is only 4%. The percent of colored population is negligible. The principal nationalities in the town are Scotch, Welsh, German and English. Seasonal changes in the population are very slight— but the changes which do occur are due to the public schools and the Cannery. Non-resident population is only 4%.

There are 965 acres within the city limits of Hillsboro. Seventy five percent of the this is improved or at least subdivided.

The community is composed chiefly, to residences. It is composed of for the most part by retired farmers who have moved to town to educate their children or a place to live in their old age. The principal industries of the city are first, the cannery, and second the Carnation condenser. The general economic status of the city can be said to be extremely good. The number of transients are small, the city holds enough jobs within its limits to keep most of its working population busy. Indigents are very small. Intercourse with other cities is excellent. There is steam train, buses, and airiplane if one desires.

The form of government if the Council-City Manager form of government. The city manager runs the city but is responsible for his acts to the city council which is composed of 8 members. His position depends upon their selection. He has full buying power for the city, and also handles the city budget.
The total revenues for the year were $1,732 dollars. This is the budgeted revenue. Total expenditures are the same since this is a budget system used here. The total taxable valuation is $1,646,149.60, amounting to a tax of 16.2 Mils on the dollar. A reduction of 1.3 Mils since a City manager was appointed last year.

There are numerous Civic Organizations in Hillsboro. Chief among these are the Rotary club, Chamber of Commerce, twelve womens clubs and Four national lodges. The only health activities being carried on by civic organization are the Relief board in the various lodges, The County relief board, and the Hoover relief fund which was just raised amounting to 3,000 dollars, and the American Legion. However the relief of these organizations for care of the sick is quite limited in their scope. The various lodges only care for their needy members, the same for the American Legion whereas the county relief board does give some relief, but of only a short period of time. The county has a Poor Farm where some relief is given but it is mostly for the poor aged.

All business operating in the city must pay a city tax and secure a permit to run their business. This amounts more to a source of revenue than to see that the business is run on a proper basis or any inspection is done.

Hillsboro is the county seat of Washington County.
The Health Department

The health department is composed of one member, that is a registered medical doctor, who fulfills this office. He gains his office through appointment from the county court. This position requires very little of the Doctor's time in Hillsboro. When his time is not taken up with the duties of Health Officer he is allowed to do his own practice.

The salary of the Health Officer amounts to about $600 a year, plus the amount which he makes off of registrations as births and deaths.

One other was person was up until recently associated with him, that being a County Health Nurse. She was recently released because the taxpayers of the county figured that taxes were too high and she could be dropped from the budget list.

There are no non-official health agencies in Hillsboro.
The Health Officer of Hillsboro is Dr. Dinsmore who has been Health Officer for the last two years. There is no other personnel to the staff he alone comprises it.

There are no expenditures for anything outside of his own salary. Formerly a county health nurse was employed but was recently released due to pressure brought by tax payers. The salary of the health officer amounts to about 600 dollars a year. This includes registrations for births and marriages.

The duties of the health officer are only a few in Hillsboro.

1. He has only a few executive and administrative problems. They have mainly to do with telling of the work of the Health office. He has no subordinates consequently he has no executive problems. His administration depends upon his own ideas of how his work should be carried out as he is checked on by no one unless it be the state board of health.


3. Industrial Hygiene.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>BIRTHS</th>
<th>DEATHS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1925</td>
<td>1926</td>
</tr>
<tr>
<td>Total Births</td>
<td>366</td>
<td>340</td>
</tr>
<tr>
<td>Total Deaths</td>
<td>267</td>
<td>241</td>
</tr>
</tbody>
</table>

List of principle causes of death during the years 1925-1929

1. Organic Heart Disease.
2. Cancer
3. Pneumonia
4. Tuberculosis
5. Nephritis
6. Apoplexy—includes cerebral embolism and thrombosis
CONTROL OF COMMUNICABLE DISEASES.

Control measures against Communicable diseases are namely

1. Medical inspection of cases
2. Adequate isolation of exposed people and adequate quarantine for the patients who have the disease.
3. Hospitalization
4. Immunization where possible.
5. The offering of Vaccination and Toxin-Antitoxin to students in the public schools.
6. Education of the laymen.

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMALLPOX</td>
<td>12-0</td>
<td>34-0</td>
<td>5-0</td>
<td>76-0</td>
<td>63-0</td>
</tr>
<tr>
<td>TYPHOID</td>
<td>11-2</td>
<td>3-1</td>
<td>5-0</td>
<td>5-1</td>
<td>3-2</td>
</tr>
<tr>
<td>DIPHTHERIAE</td>
<td>33-1</td>
<td>24-3</td>
<td>26-1</td>
<td>45-5</td>
<td>8-1</td>
</tr>
<tr>
<td>SCARLET FEVER</td>
<td>54-1</td>
<td>65-0</td>
<td>48-0</td>
<td>25-1</td>
<td>29-0</td>
</tr>
<tr>
<td>TUBERCULOSIS</td>
<td>14-11</td>
<td>10-4</td>
<td>11-7</td>
<td>14-11</td>
<td>20-7</td>
</tr>
<tr>
<td>MEASLES</td>
<td>2-0</td>
<td>107-0</td>
<td>91-0</td>
<td>24-0</td>
<td>167-0</td>
</tr>
<tr>
<td>WHOOPING COUGH</td>
<td>9-0</td>
<td>43-1</td>
<td>42-3</td>
<td>3-0</td>
<td>2-0</td>
</tr>
</tbody>
</table>

All blanks used for these diseases are those provided by the State Board of Health. The disease reportable are the same as those prescribed by the state. A weekly report of communicable disease is made to the Secretary of the State Board of Health in Portland. Also the periods of quarantine for the various communicable disease are fixed by state regulations.
COMMUNCIABLE DISEASES CONTINUED.

The figures given for the various communicable diseases here are morbidity rates per 100,000

<table>
<thead>
<tr>
<th>Year</th>
<th>Smallpox</th>
<th>Typhoid</th>
<th>Scarlet F.</th>
<th>T.B. all Forms</th>
<th>Measles</th>
<th>Whooping Cough</th>
<th>Death From all Causes</th>
<th>Infant Mortality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1925</td>
<td>39.7</td>
<td>6.65</td>
<td>16.5</td>
<td>47.6</td>
<td>36.5</td>
<td>9.0</td>
<td>920</td>
<td>46.9</td>
</tr>
<tr>
<td>1926</td>
<td>109.6</td>
<td>10.0</td>
<td>22.3</td>
<td>33.8</td>
<td>36.5</td>
<td>3.4</td>
<td>615</td>
<td>41.1</td>
</tr>
<tr>
<td>1927</td>
<td>16.8</td>
<td>17.0</td>
<td>16.3</td>
<td>36.6</td>
<td>30.2</td>
<td>6.6</td>
<td>905</td>
<td>55.1</td>
</tr>
<tr>
<td>1928</td>
<td>133.4</td>
<td>16.6</td>
<td>65.6</td>
<td>47.5</td>
<td>61.5</td>
<td>5.4</td>
<td>967</td>
<td>32.4</td>
</tr>
<tr>
<td>1929</td>
<td>127.5</td>
<td>10.0</td>
<td>97.0</td>
<td>66.7</td>
<td>52.4</td>
<td>3.6</td>
<td>966</td>
<td>37.0</td>
</tr>
</tbody>
</table>

Infant Mortality Rate per 1000 live births.

Diptherae 3.4 10.1 3.3 17.0 3.3

It was impossible to determine the number of cases investigated each year but according to the Health Officer it was about 92%.
CONTROL OF VENEREAL DISEASES.

Only a few of the total cases of venereal disease are reported. Only a few of the Physicians keep records of their cases. Control of venereal disease is not promoted through the Hillsboro health department. The health officer does not take any interest in this. No provision is made by the county for treatment of the charity cases, or any help gained from the city. The patient must consult a private practitioner. A method which should be considered under control is that work done by the State Board of Health and also the National Government in education of the public concerning venereal diseases. Below is a list of Venereal disease for the County of Washington.

<table>
<thead>
<tr>
<th></th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syphilis</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>11</td>
<td>17</td>
<td>6</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

Concerning prostitution there are no laws concerning it. They have never had to consider this evil.

The number of non-medical practitioners are:

Chiropractors  3
Naturopath     1
Osteopath      1

Christian Science Healers. Number could not be determined.

m. D. ----- 6
CONTROL OF MILK SUPPLIES.

No legal provisions of any kind are engendered against low grade milk. The only inspection of the milk is what is done by the state, and that milk which is used in Hillsboro and Portland. There is no enforcement against milk of any kind. Consequently no prosecutions or convictions for or against milk.

Two of these dairies were visited. They were both fairly up to date. The milkers which consisted chiefly of members of the family did not have or take special precautions for milking. The hands were improperly washed and the cows' teats were cleaned only slightly. The stables however were kept quite clean. The stall manure is removed every morning and fresh straw placed in each stall. Pictures of one of these dairies is on the accompanying pages. Both of these dairies had milk houses where the milk was taken after milking and allowed to cool. The milk houses were of lower cement foundation and the upper part was built of wood. It was no fixed so they could be hosed out with fresh water. However regardless of this they were in quite neat shape. No dust could be found in the milk house. Bottles for the milk and sterilized before the milk is put in. The milk is not pasturized.

The number of dairies producing milk in Hillsboro is 4. The only inspection is that made by the state and that milk going to Portland which is inspected by companies from there. The location of these dairies is in the surrounding country, none are in the suburbs, or the city.

Veterinary inspection is done by the state. No
inspection of any kind is made for by the City of Hillsboro. State inspection is carried out about once in six months. No physical examination of employees or operators is done. Tuberculin tests are done by the state.

No pasteurization of milk is done and consequently no repasturization. None of the dairy milk is supplying any creameries but some of the milk produce is sold to the Carnation Milk company which is located at the edge of town.

The dairy which I visited in Hillsboro are typical rural dairies. The cows are milked by hand. The milk from the cow is milked into open pails and then poured into a ten gallon can, a number of them being used. The milk is then hauled to the milk house where it is allowed to cool. It is then promptly bottled and delivered within 6 hours to consumers. The milk is allowed to cool to about 60 degrees centigrade before it is bottled.

No milk is delivered in open vessels of any sort. Some of the surplus milk is sold to the condenser but it is hauled to the condenser in large cans.

The state count for bacteria on this milk has been always satisfactory, running around 10,000 psc.c.

There has never been any positive tuberculin tests on any of his herd. And there has never been any diseases traced to bacillus abortus.
CONTROL OF FOODSTUFFS

There are 1 restaurant and 4 grocery stores in Hillsboro. They are in wooden buildings, but are clean and well kept. There is no examination of food handlers of any sort. There is one hotel in town. It is a wooden building about 25 years old, but kept quite modern and clean. It has about 30 beds. There is only one restaurant in Hillsboro. It is entirely modern, the kitchens are kept very clean. The lunchroom itself is nice and clean and the witnesses are dressed in special white dresses which are laundered very often. Soda fountains which No. 4 are very dirty and do not appear to be kept especially clean. No special attendants are hired to work in the soda fountains, but the owner or anybody working there works them. They are usually a part of something else business as a drug store or the lunchroom. Fruitstands are not inspected, and they are kept fairly clean. One fruit stand is owned by Japanese, one by an American. Thus there are two fruit stands. The produce for the most part is home grown. The fruits are however of the best quality. There is one bakery in Hillsboro. It is very clean and modern although housed in a wooden building. No ordinance requesting inspection is had by the city.

There are 3 meat markets, which are kept very clean, with white gowned clerks to wait on the public. I went personally to look at one slaughter house which is located one mile west of Hillsboro. It is very dirty and not kept up a single bit. It is an old wooden building. The eviscerated material is disposed of by burning or burning.
SUMMARY OF CONTROL AND SANITATION OF FOODSTUFFS

Due to laxity in inspection of food handlers and the stores, cleanliness and sanitation could not be graded 100%, on the contrary they could be given only about 70%. The stores for the most part are housed in wooden buildings which were erected, on the average about 25 years ago.
CONTROL OF BARBER SHOPS? BEAUTY PARLORS? BATH HOUSES.

There is no city control of Beauty Parlors or barber shops. There is no bathing houses. The above two businesses are restricted only so far as State Board of Health regulations are imposed. That is the passing of a State Board examination and also the necessity of securing a permit to practice their art. There are two beauty shops in Hillsboro and Two Barber Shops. They are in fairly clean condition. They are however housed in old wooden buildings.

There is state regulations imposed upon these businesses where by they must conform to certain sanitary rules for cleanliness and hygiene.
PUBLIC TOILET FACILITIES: COMFORT STATIONS: GARAGES GASOLINE SERVICE STATIONS AND ETC.

There are five garages in town. Each has its own flush toilet system. These toilets are not inspected. They drain into the city sewage system. These toilets are not inspected by the city. They are only cleaned when the owner of the place decides to do it, which apparently from their looks is done only about once every year. In two of the Toilets there was no paper. The rooms are dirty and no washbowl is available to wash the hands in.

Total number of service stations are ten and thus there are ten comfort stations. They are in the same conditions as the above mentioned garages except those owned by big oil companies such as Standard Oil company and the Shell Oil company. They have very clean up to date restroom with washbowl and paper and running water. The others are privately owned and in poor condition.

There is one public toilet in the County House which is owned by the County. Free access is had by people to it during the day time but it is closed at night.
CONTROL OF WATER SUPPLIES

The water supply of Hillsboro is owned by the Oregon-Washington Power Company. Pipe water was first installed in Hillsboro in 1912, by the above companies. All of this water is supplied through the gravity method. The previous supply of water before this present system was installed was by wells.

The water is slightly chlorinated by the Water Company, there being no other method of any way used to disinfect it. The supply of water is brought to Hillsboro by a 12 inch pipe.

The source of the water supply is from Sain Creek—the water is brought a distance of about 15 miles to a reservoir. The water as above mentioned is brought by the gravity method.

The water is treated by chlorination. This work is done by the Oregon-Washington Power company under control of the state board of health. The rated capacity of the water supply is 1.5 million per MGD. The operated capacity of the water supply is 1 Million gallons per day. The water supply is however at this time inadequate in the summer time to meet the full requirements of the city.

According to the Health Officer the water is checked only twice a year for cleanliness and bacterial count. This count is done by the state board of health, and the last examination showed it to be A No.1 water.

The water of Hillsboro, that is the city, supplies all those within its limits who wish to join. That is all business houses and residences and the local Cannery. The Condenser does no use city water but draws its own water from the Tualitin river.
CONTROL OF WATER SUPPLIES CON'T

The private water supply is still quite large. The total number of wells within the city limits numbers approximately 100. The wells are adequately protected. One of these wells was inspected, it was made of concrete around the top and properly covered by a cover of boards on top. No spring water is used within the city limits of Hillsboro.

Note:
The exact origin of the water for Hillsboro is brought from Sain creek which arises just above Gaston Oregon. The water is brought through pipes which follow the State Highway to Hillsboro.

There never has been any disease traceable to the water supply in Hillsboro.
CONTROL OF EXCRETA DISPOSAL

THE PUBLIC SEWERAGE SYSTEM

The present sewerage system was installed in 1911. The same systems has been used every since.

The system is under direct supervision of the City Health Officer. The city manager also has some control over this system.

The percent of population accessible to the sewerage system if 80% while only 60% are connected with it. Only about 2% of outside flush toilets are connected up with the sewerage system.

The type of Sewer system is First the Sanitary Sewer system which is connected with a Spetic Tank. The other part of the system is the storm sewer. They are separate and no combined.

The treatment of the sewerage is by means of a spetic tank which disposes of the material. There is no effluent or sterileized or stability.

The outfall sewer empties into the Tualitin River. The sewer septic tank is located on the opposite side of town from the water supply. The spetic tank for the city is located about one mile from town in a field owned by the city. The overflow from this drains across an open field into the Tualitin river. After inspection this I inquired from people who lived near by and they said they were making a complaint about it, because of the odor and unhealthiness of it. It is a very dangerous situation.
PRIVATE METHOD OF EXCRETA DISPOSAL.

The number of privies on the surface amount to about 75. The number of septic tanks are about 200. There are no vaults or cesspools.

There are no legal provisions against this in the City of Hillsboro except that those who lie in the so called sewer district of the City must be connected up with it. I mean by this that the city sewer system is not adequate to allow all the people within its limits to empty their disposal into it. But the people within the inner two-thirds of the city must be connected up with it.

Beyond this there is no supervision of any kind.
GENERAL SANITATION

Nuisances are classified here according to the definition given by Dr. Rosenau, on the Statutory Law of Utah. "Whatever is dangerous to human life, and whatever renders soils, air, water, or food impure or unwholesome are declared to be nuisance."

Nuisances concerning Health matters is directly under the control of the City Health Officer, The City Manager and the Police Department.

Those things considered nuisances by the City are:

1. Filth, such as garbage, ashes, slops either on private property or on public highways.
2. Defective plumbing and draining
3. Weeds
4. Spitting in Public Places
5. Sale of Liquor
6. Offences against decency

The method of control is mainly through the action of private citizens swearing out a warrant and then the nuisances are investigated. These cases are disposed of through their cause. Usually by County court Trial.

So far this year the only complaint which has been received has been due to the draining of the septic tank through this canal in the field to the Tualitin river. The problem of meeting this now lies before the City Council.

All plumbing Inspection is done by the Chief of Police and the man who is City Manager.

Disposal of garbage is done privately through a franchise through the city. The city has no incinerator. The garbage and cans and ashes are collected on an average of 1 x a week.
The garbage which is collected is taken out to the so-called city dump which is located 2 miles from town. Here all refuse is piled, to be burned 2 times a year. I observed while visiting this dump that a great share of the material is not burnable, and there is quite an accumulation of trash over the ground. It is a very unhealthy condition. However, there are no people living within a quarter of a mile of the place. Dead animals are disposed of by burning.

The city does not have to contend with manure within its city limits, however, those having manure who live just outside of the city limits usually use it for fertilizing.

The streets of the business district of town are flushed off with water every other day. Then every morning the streets are swept with a brush. In the residential district the streets are flushed off as is needed.
INDUSTRIAL CONDITIONS.

The Dominant Industry of Hillsboro is the Ray-Maling Cannery. The cannery is housed in a tile building with full cement floor. The cannery covers an area of about 5 square city blocks. The building was erected in 1922. The building is of excellent construction, and being absolutely fireproof, with all the fire and electrical system outside of the main building. The cannery when running at top speed hires about 700 people. The water supply is that furnished by the city water.

Medical service for the workers is provided through a compensation method. The worker is deducted a few cents monthly from his wages which goes into a pool from which is paid doctor bills when he is injured or sick. The worker has the choice of physician in the matter. No Single doctor is employed by the cannery although it was previously handled in this way.

The industry is detrimental to the employees in that the Oregon Labor laws are not followed as they should be. I speak as one who has worked three summers for this concern. It is not uncommon for workers to put in from 16 to 18 hours or more a day during rush seasons, with no increase in pay for overtime.