PUBLIC HEALTH REPORT
FOR
THE CITY OF TILLAMOOK, OREGON

Marion Reed
1931
Introduction

After the discovery, by Captain Robert Gray, of the Tillamook Bay, August 2, 1788, no move was made to settle this fertile country until 1851 when, as a part of the general influx of pioneers into the far West, the first settlers came in April 1851. They came into the Tillamook Bay region by way of the Willamette Valley, or by boat from Portland or Astoria up to the time of the railroad from Portland which was built in 1911.

The principle industries of the county are dairying, logging, farming, fishing, and the raising of dairy stock. There are along the beach many summer resorts popular during the vacation months for their beautiful scenery, attractive beaches, picnicking, hiking, and fishing. Because of the logging and fishing as well as the presence of summer resorts, the population is quite variable during the different seasons of the year both in number and in type, consisting in a comparatively small number which comprise the tax-paying, basic population. This is made up of the farmers, small business owners in the various towns of the county, and any other property owners including those owning beach resorts. The farmers and the cheese workers are of foreign birth -- German and Swiss in the main; the Germans, most of whom were born in Germany, making up the farming and dairy-owning contingent, and the Swiss owning and operating the cheese factories for which the county is so famous. The logging and fishing interests have drawn Scandinavians, and the railroads have brought in a small number of Mexicans and Japanese.
The county is partially under cultivation, but most of the land is still given over to lumber — either already denuded and barren by exploiting lumber companies or still with virgin growth of questionable value.

The southern end of the county is the oldest settled and is therefore, the best cultivated — consisting of low rolling hills covered with alder and evergreen conifers — interspersed with meadows under cultivation or used for grazing purposes for the dairy herds and sheep.

The north end is a more rugged country less cultivated, and still being "logged out". The lumber is for the most part shipped out by water over the bars, at the Nehalem and Tillamook bays, though a certain amount also is shipped out by way of the railroad.

The county on the whole is still quite undeveloped — enterprising people, interested in the progress and growth of the county and in bringing in others with capital and vision are quite few in number. Nevertheless, considerable time and effort has been spent to bring about the development of roads, which are of prime importance to a district so lacking in good railroad service and so cut-off by natural barriers. There is yet a great deal to be done in the way of highway building, and that which has already been accomplished has brought the Tillamook region closer to the Willamette Valley. It has brought also, especially during the summer, great numbers of vacationers, fishermen, and the shop-owners, and concessionists who follow excursionists to the string of beaches, which form almost a continuous line from the North to the South end of the county.
Like all the territory west of the Coast Range of Oregon, Tillamook has plenty of water-fall each year, the general growth of vegetation being almost tropical in abundance the year around because of the small variation in temperature. The soil is very fertile -- almost any of the usual farm crops grow without difficulty. The alfalfa, hay, and grain are sent out into the Willamette Valley or to Portland to be sold, as are also the lumber, cheese, and other dairy products.

It is almost impossible to separate, so far as general considerations are concerned, as well as statistical, the city of Tillamook from the county because it is the only town of any size within the county, and constitutes about one-third of the population of the county -- so that this study in a general way includes the whole county, and specifically, as nearly as possible, only the township.
A. Descriptive Data of the City of Tillamook

Population of Tillamook city:

U.S. Census, 1920: 1,964
" " , 1930: 2,549

Population of Tillamook county:

U.S. Census, 1930: 11,824

<table>
<thead>
<tr>
<th>Native White Population Native Parentage</th>
<th>Foreign or Mixed Parentage</th>
<th>Foreign-born White Pop.</th>
<th>Negro</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,969</td>
<td>1,795</td>
<td>1,010</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pop. 7-20 yrs.</th>
<th>10 yrs. &amp; over</th>
<th>21 yrs. &amp; over</th>
<th>Native White</th>
<th>Foreign-born White</th>
<th>Negro</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Attending school</td>
<td>Total Illiterate</td>
<td>Total Illiterate</td>
<td>Total Naturalized</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2,171</td>
<td>1,631</td>
<td>6,872</td>
<td>42</td>
<td>5,270</td>
<td>38</td>
</tr>
</tbody>
</table>

The principal nationalities are German, Scandinavian, Finnish, and Swiss.

Seasonal changes in population are marked because, as mentioned above, the summer resorts, which are numerous here, and the logging-camps, bring in large numbers of transients. There is no way of estimating, though, the number which do come into the county for a short time.

The area of Tillamook city is 80 by 100 chains. It is divided up into five wards which together constitute 75% of the area, meaning that this amount is built up, within the city limits.
The type of community is industrial and residential, the latter being existent for the housing of the industrial workers, is of a modest nature.

The general economic status of the community is very low, and has been except when the lumber industry was booming. This occurs only intermittently however, and the last ten years the lumber business has been minimal in amount expressing it mildly. There was no way of finding the actual percentages of indigent, wage-earning and home-owning. A good deal of business is carried on in the city because it is in the center of the county, and shipments of various commodities are made to and from it generally, either by railroad to other cities, i.e. Portland, or by Tillamook Bay, by boat to Astoria or Washington.

The government is council form. The assessed valuation in 1929 was $2,025,920. Total expenditures so far is fiscal year 1931 have been $43,000. The taxes levied on 1929 role were $48,298.

Civic organizations are forty -- seven lodges -- of the usual kind. The health activities carried on by these will be discussed below.

The license permits issued by the city are for pool-halls, soft drinks and confectioneries, dances, trucks and teams, peddlers, bowling alleys, and woodsaws.
E. Organization of Health Department

The health department of the city is comprised of the County Health Officer and the County Health Nurse. This is the only official organization which carries on the health program prescribed by law. They have no committees working for them nor any true department of health as such. All of the measures to be carried out under the state or county ordinances are carried out by these two individuals as well as they can. The County Health Officer has a salary of $50 a month. He is always one of the practicing physicians of Tillamook City, and carries on a private practice at the same time that he fills this office. His duties consist mainly in the quarantining of contagious diseases; inspection of auto camps, concerning the disposal of garbage, cleanliness of toilets; and the general neatness and appearance of camping-grounds. He has the power to withhold the licence of any individual who owns or operates such a resort who does not comply with his suggestions. Another duty is that of vaccination of school children and adults particularly during epidemics. The Health Officer is appointed by the County Court, to which the Officer is responsible. The County Court also appropriates the necessary funds for the salaries of the Health Officer and the County Health Nurse, and $3 per day for each county patient at the local hospital. There is no County hospital, arrangements having been made with one of the three local private hospitals to take the county patients. The County Court investigates these patients -- as to their eligibility to the county support -- rather than the Health Officer who can, however, make his recommendations. The expenditures include also the widows' pensions, and the poor fund, which is an
elastic sum.

The County Health Nurse, appointed by State Bureau of Nursing, receives $210 per month from the county, and supplies her own transportation -- the latter item is a large one in view of the fact that the county is about sixty miles in length and she is the only person to do this particular work, there being no visiting nurse to this county. She also is allowed 45% of the fund coming from the local sale of tuberculosis stamps.

There has been a Nurse within the county for the past seven years, and it is interesting to note the lack of cooperation between this Nurse (there have been four different Nurses within this time) and the County Health Officer. This is an important factor in the development of health measures within the county, for when each works alone over such a large territory, overlapping in some areas, and neglect of others is bound to occur unless some organization is worked out. It is also true that the Nurse needs the advice and direction of the medical profession because she is not a member of it herself -- and especially in a population so poorly educated or interested in promotion of good health. In other words the Nurse can make little progress in a community where she has no cooperation with the local medical men on the one hand, and a disinterested public on the other. The reasons for this are -- partly personal -- due to a lack of definite duties for which the nurse alone is responsible, and lack of tact and respect for the local professional men on the part of the nurse. Secondly, the doctors are put to it to earn a living from their private practice without giving time to the good of
the community.

Time is given by some of these men, however, to conduct the pre-school clinics which are held yearly shortly after the school year ends in the early summer. The purpose of these clinics is to examine the children who are entering school the following fall. Thorough physical examinations are made of each child, including eyes, throat, and teeth. These are held all over the county.

The present Nurse and other foregoing Nurses have tried to establish tuberculosis clinics, and clinics in infant care and feeding. The latter have been well attended but are not held at present. The former have been entirely unsuccessful because of the lack of education along the lines of early symptoms and diagnosis.

The type of clinic held of course, varies with the particular training of the Nurse in office, because there are no special clinics named officially which have to be held.

There is a lay health association which sells the tuberculosis stamps and who help more or less the work of the County Health Nurse.

The American Legion is active in relief work. It takes care of war veterans, and their wives, widows, and children. It assists the County Health Nurse in finding positions for men and women out of work, and in helping destitute family by giving food and clothing.

There are no licensed midwives in the county -- paying cases are cared for by local practical nurses -- county obstetric cases go to the hospitals for confinement.
List of Deaths Classified by Principle Causes for a Period of Five Years (City of Tillamook)

Congenital atelectasis          1
Premature birth                 16
Birth injury                    6
Umbilical hemorrhage           1
Inanition                       1
Puerperal sepsis                3
Ruptured ectopic pregnancy     1
Puerperal hemorrhage           1
Abortion                        1
Cesarian section               1
Acute rheumatic fever          3
Endocarditis                    14
     , chronic
Cardiac asthma                  1
Mitral regurgitation            2
Angina pectoris                 1
Aortic regurgitation            5
Mitral stenosis                 1
Aortic stenosis                 4
Myocardial degeneration         16
Heart block                     2
Arteriosclerosis                3
Pericarditis                    1
Acute dilatation of the heart   1
<table>
<thead>
<tr>
<th>Cause</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td></td>
</tr>
<tr>
<td>Stomach</td>
<td>9</td>
</tr>
<tr>
<td>Lip</td>
<td>2</td>
</tr>
<tr>
<td>Uterus</td>
<td>8</td>
</tr>
<tr>
<td>Liver and gall bladder</td>
<td>7</td>
</tr>
<tr>
<td>Ovary</td>
<td>1</td>
</tr>
<tr>
<td>Colon</td>
<td>3</td>
</tr>
<tr>
<td>Bladder, urinary</td>
<td>1</td>
</tr>
<tr>
<td>Rectum</td>
<td>1</td>
</tr>
<tr>
<td>Breast</td>
<td>1</td>
</tr>
<tr>
<td>Boneosarcoma</td>
<td>1</td>
</tr>
<tr>
<td>Accidental, fracture of skull</td>
<td>6</td>
</tr>
<tr>
<td>&quot; other injuries</td>
<td>17</td>
</tr>
<tr>
<td>Poisoning</td>
<td>2</td>
</tr>
<tr>
<td>Burning</td>
<td>2</td>
</tr>
<tr>
<td>Suicide</td>
<td>5</td>
</tr>
<tr>
<td>Cerebral hemorrhage</td>
<td>23</td>
</tr>
<tr>
<td>Apoplexy</td>
<td>3</td>
</tr>
<tr>
<td>Cerebral embolism</td>
<td>2</td>
</tr>
<tr>
<td>Malnutrition</td>
<td>2</td>
</tr>
<tr>
<td>Nephritis</td>
<td>1</td>
</tr>
<tr>
<td>Uremia</td>
<td>11</td>
</tr>
<tr>
<td>Lobar pneumonia</td>
<td>22</td>
</tr>
<tr>
<td>Bronchial pneumonia</td>
<td>14</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>1</td>
</tr>
<tr>
<td>Influenza</td>
<td>4</td>
</tr>
<tr>
<td>Empyema</td>
<td>1</td>
</tr>
<tr>
<td>Peritonsillar abscess</td>
<td>2</td>
</tr>
</tbody>
</table>
List of Deaths (con't)

Acute tonsillitis 1
Ludwig's angina 1
Edema of glottis 1
Acute enteritis 1
Septicemia 3
Erysipelas 3
Pertussis 1
Pernicious anemia 1
Non-epidemic cerebro-spinal meningitis 1
Encephalitis 1
Paralysis, cause not given 2
Multiple sclerosis 1
Epilepsy 1
Tuberculosis, pulmonary, meningitic, enteritic 3
Arthritis deformans 1
Rheumatoid arthritis 1
Exhaustion 1
Senility, no other cause given 5
Gastric ulcer, hemorrhage from 1
Cirrhosis of liver 2
Obstruction of colon 1
Diabetes mellitus 8
Mastoiditis 1
Bacillary dysentery 1
Anencephalia 1
Surgical shock 1
Anesthesia 1
Strangulated hernia 1
List of Deaths (con't)

Acute appendicitis  6
Cholecystitis, acute  3
Acute salpingitis  2
Post-operative peritonitis  2

(Terms used are those given in the death certificates because no specific knowledge of the conditions existing was available. So that many are present which are not in the International List of Causes of Death.)

Vital Statistics for Tillamook County

<table>
<thead>
<tr>
<th>Year</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Births</strong></td>
<td>240</td>
<td>247</td>
<td>221</td>
<td>219</td>
<td>218</td>
</tr>
<tr>
<td><strong>Total Deaths</strong></td>
<td>128</td>
<td>114</td>
<td>114</td>
<td>119</td>
<td>102</td>
</tr>
</tbody>
</table>
C. Control of Communicable Diseases

Control measures are organized only by minimization of exposure of cases, and isolation of the patients with the diseases. There is a minimum of vaccination for small pox because public sentiment is if anything, indifferent to it as is shown by the statistics below in the high number of cases.

The local physicians do as much as they can but in most instances they are not called on a case until it is well advanced, and all of the members of the family have been exposed.

Schools are closed during severe epidemics of measles, smallpox or scarlet fever.

Reporting of the communicable diseases is according to the health officer, 100%. Even if this were so, however, there are cases undoubtedly which never are seen by a physician in such an uneducated, poor population as this; so that it is probably not 100%.

In the instance of venereal diseases, the reporting is ridiculously low as can be seen by the statistics given below. Those cases which are reported lack the residence of the patient on the report card so that anything but county statistics are useless. Of course, nothing can be gained by reporting so few cases as these shown, and this lack is the responsibility of the physician. No doubt there are cases, again, which never appear in the doctor's office, either from ignorance of the presence of disease, or simply waiting for the self-limited gonorrhea to subside without treatment.
List of Communicable Diseases for Five Years for Tillamook County

<table>
<thead>
<tr>
<th>Diseases</th>
<th>1926 Cases</th>
<th>Dts</th>
<th>1927 Cases</th>
<th>Dts</th>
<th>1928 Cases</th>
<th>Dts</th>
<th>1929 Cases</th>
<th>Dts</th>
<th>1930 Cases</th>
<th>Dts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smallpox</td>
<td>16</td>
<td>3</td>
<td>78</td>
<td>1</td>
<td>9</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Typhoid</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphtheria</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarlet Fever</td>
<td>4</td>
<td>15</td>
<td>2</td>
<td>26</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>10</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>12</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>46</td>
<td>27</td>
<td>26</td>
<td></td>
<td>53</td>
<td></td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>3</td>
<td></td>
<td>18</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Hotels and Rooming-Houses

There are four hotels in the city of Tillamook: the "Neff", the "Todd", the "Netherland", and the "Tillamook" hotels. They all are on or within a block of the main street and have capacities approximating 50 bedrooms each. The water supply is the same as that supplying the rest of the town, and each room contains running water in the Tillamook and Neff Hotels. The Netherland and the Todd, being older buildings and not quite so well furnished have bathrooms with running water, toilet and bath tubs on each floor -- as is true of the first two -- but no running water in the bedrooms. The windows of these hotels are screened only during the summer months. The rooms are kept clean, the bedding is in good condition to superficial inspection, and daily sweeping and dusting by maids and janitors keep all of these in fairly clean condition.

There is one apartment house which is new, clean and attractive. Every apartment was taken during the summer months, it was noted.
E. Control of Barber Shops, Beauty Parlors, Comfort Stations

The barber shops -- of which there are three -- are in fair condition -- i.e. the floors and furniture are swept and dusted daily, the utensils are clean on gross inspection, and antiseptic solutions are used for the instruments coming in contact with the customers. Absolute asepsis is not present as is the custom in the general run of such places, but there is compliance with the law, and inspection, which in once during the year, is regular.

The one beauty parlor does not vary from the above. It is in fact cleaner and neater in appearance than the barber shops. The question of the health of the operators of these is a difficult subject upon which to get satisfactory answers. To outward appearance, and to direct questioning they are all of at least moderate good health.

The public comfort stations are all connected with service stations of the various oil companies. These are all clean -- considering the amount of daily traffic -- and are cleaned at least once daily by the owners. All have running water and flush toilets, paper towels and liquid soap, and containers for all waste material.

There are running water and flush toilets in all of these establishments.
F. Control of Foodstuffs

Groceries which include fruit, meat markets, bread and pastries combined in one are the most numerous sources of food supply within the city limits. Two of these are chain stores, and the remaining three are privately owned. There are two bakeries in the town. The privately owned shops are better kept than the chain stores: the floors cleaner, the vegetables clean and neat, and the shelves well kept, and the buildings newer.

Sterilization of utensils is seldom found but frequent thorough washing with soap and water is the rule, followed by rinsing with hot water.

The fruits and vegetables on display are not covered, but the bakery products are in the main wrapped in waxed paper or kept in glass cases.

Flies are a problem only in the summer, of course, but during this time no special care is taken to protect the fruits and vegetables unless they are shipped with paper wrappings.
G. Control of Venereal Diseases.

No provisions are made for the treatment of venereal diseases through the health department or any other public-spirited body. No clinics are held. Whatever treatment is done is that done by physicians in their private practice.

There are no laws regarding prostitution, and no knowledge of the situation as to number of prostitutes and other particulars, could be acquired. The shifting type of population is in great degree responsible for this, of course.
M. Control of Excreta Disposal

1. Public Sewage System.

The city sewage disposal is by means of a combined system of drains which empty into two large pipes forming an outfall sewer. There is no supervision nor legal provision made so far as could be found out. All of the population is connected except twenty-five or thirty homes. There are about twelve outhouses within the city limits. The terminal pipes empty into the Trask River on the west, about one-half mile from the city limits. When the tide is high these outlets are below the level of the water. When low, they are two or three feet above -- appearing one foot out from the side of the bank. There are two or three farm-houses in the immediate vicinity. No treatment of any kind is used for sterilization, nor is there a disposal plant.

The position of these outfall sewers is seven miles from the city water supply, and is at sea-level, thereby eliminating any chance of pollution through drainage, the water supply being 235 feet above sea-level. There is no bathing beach within twelve miles, and that one is on the far side of a solid range of hills. The river runs northwest into Tillamook Bay. The only chance of contamination from this system is at the point of outfall, and along the river, the chance of children playing in the water always being present, as well as occasional bathers.

2. Private Methods of Excreta Disposal.

As mentioned above, as many as twelve vault privies are to be found in the town, no connection being made with the city system of disposal. No cess-pools were found. Twenty-five or thirty homes have septic tanks. These are in the southeast section
of the town. No supervision is made of these except of course that made by the owners.

This system on the whole, though so simple, is effectual for this town so far as can be made out by a person not a resident. There are practically no epidemics of any kind beside the usual upper respiratory infections and childhood diseases, and especially are there none which could be traced to a water or excreta-born infection.
I. Water Supply.

This has never been privately owned but has always been city owned, and operated by the water commission. Up to 1905 it consisted of a reservoir with a wooden pipe line for delivery. The new mains, and present supply were installed in 1924, and in 1925 the water from Fawcett Creek was added to that originally used coming from Killam Creek.

The main lead is an eighteen-inch wooden pipe. In the town steel pipes were used, but are now replaced by cast iron.

Purification was begun in 1928. There is plenty of water at all times due to the plentiful rainfall west of the Coast Range. Usually the water from Fawcett Creek is sufficient, but occasionally Killam Creek water is necessary also.

The source of supply is up in some hills to the northeast of the city, 235 feet above the level of the city and seven miles and on the opposite side of the town from the sewage disposal. It comes from the two creeks mentioned above, reservoir being made by the damming of these. Treatment consists of chlorination which is in charge of the water commission which gives it daily inspection. The equipment is housed, i.e. the engine used in chlorinating, and it puts in ten pounds of chlorine per 24 hours. Its capacity is 25 pounds of chlorine. No filter is used, and there is no other disinfectant used.

The water is examined monthly by the State Board of Health and is reported as being grade A always. This is not difficult to understand because the only source of contamination is that of some nearby habitation, and because of the infrequency of homes
in these hills, and the absence of all logging activities nearby, the chance of pollution is very small. Quoting from the actual reports of several months there have been 22 bacteria per c.c., 600 bacteria per c.c., and 26 per c.c. The average is around 20.

The supply for the various industries, hotels, and residents is all the same.

No wells exist in the town, nor springs.
J. Eating Places and Soda Fountains

The "Palm", a small combination restaurant and soda fountain on Main Street, is in an old, rather dark building with only two front windows and the door for ventilation. The kitchen is at the back and the room is kept cool and comfortable with electric fans. Sterilization of utensils is not done, except by rinsing of them by boiling water after washing in soap and hot water -- this is an effective method of sterilization used in every establishment. The water supply is the same as that going to the rest of the town, and is usually quite pure. It is a moderately clean place -- sweeping and dusting the usual method of cleaning with intermittent and infrequent scrubbing of floor, walls and tables with soap and water.

The "XXX" fountain and eating place on Main Street but at the edge of town gives a very clean appearance. There are windows all around giving plenty of light and ventilation. It is kept very clean with frequent scrubbing and sweeping. There is no display of foods in either of these places.

The "Louvre" is a restaurant on Main Street which is moderately clean in the dining-room, but the kitchen is very dirty and ill-kept -- very little ventilation and the utensils not well cleaned. The dishes used in the dining-room are clean, however.

The "American" restaurant on Main Street is easily the most unattractive eating place in the town. It is not ill-ventilated nor very dark, but it is dirty and the food sloppily and poorly served.

The fountain at the bus terminal is a very neat place, the food on display is kept in glass cases, and utensils and dishes
are kept clean.

The only examination of these places is yearly by the State Inspector. No examination of food handlers, as such, is made.
County Milk Sanitation

This topic is discussed for the county because there are no dairies within the city limits, but it is an item of such importance in this dairying community that it cannot be ignored. The exact number of dairies in the county is not known but the information given below was received from the county dairy inspector, which is an entirely reliable source.

No pasteurization is done within the county because the milk is used quickly within twenty-four hours after milking, all sources of supply being close to the consumer; i.e. cheese factories or homes.

Tuberculin tests are made yearly of each animal in each herd, by the state and county inspectors. Reports are made to the owners, and these animals are removed from the herd. This testing, and removal of infected cows is rigorously adhered to throughout the county.

The Cheese Industry

The cheese factories plentifully sprinkled about the county are in every instance models of lighting, ventilation, and cleanliness. The numerous doors, and windows are open almost continuously, the windows screened in the warm weather, and screen doors used. The county inspector of cheese takes a sample from each batch of cheese and tests it for flavor, odor and bacterial count, three times annually.

The cheese is paraffined immediately on formation, and is kept in a side room for ageing.

No direct handling of the cheese as it is being made, occurs, wooden paddles, poles and slabs only coming in contact with it.
Milk Production Items

Item of Sanitation

Cows, Tuberculin testing and physical examination..........................
Dairy barns:
  Lighting.................................
  Air space..............................
Barnyard................................
Milk rooms..............................
Toilets: Location, construction and operation..............................

Water supply............................

Utensils:
  Sterilization with steam.................
  Sterilization with hot water...........
  Storage................................
  Handling................................
Milking................................

Udders and teats.........................
Flanks................................
Hands................................
Clothing.................................
Milk stools..............................

Cooling................................

D bottling and capping: Method..............

Employees: Health certificates...........

Bacterial counts:
  Bacterial counts under 50,000 per c.c.
  Bacterial counts 200,000 to 1,000,000

Per cent complying

100 %
90 %
Low; 50% have less than 3 sq.ft. per cow.
Only moderately well kept.
80 % are well kept. 50 per yr. new, lately.

Mainly all cesspools --
liquid tanks and used for
fertilizer.
Usually gravity supply,
from gravel supply.

For those distributing raw
milk.

Instead of boiling.
None.
Little.

Wet milking is decreasing
last 2 or 3 yrs.
Use petrolatum mainly.

Supposed to comply with rules.

" " " " "

" " " " "

None.

Mainly by machine; 10% by hand.
Not required.

Mostly between 50,000-100,000.
60% is grade E.
Only 2%. 40% is grade C.
Some grade A.
Conclusions.

In view of the fact that this community is made up of ignorant, indifferent individuals, many of them of foreign birth, that the development industrially is still in infancy, that up to ten years ago there was none or little communication with other communities, and that financially the county stands near the bottom of the list -- it would seem that little in the way of interest in public health can be expected to exist. There are many capable physicians and surgeons here and they are kept busy, showing that there is a necessity for medical care. No doubt the plentiful water supply, the moderately cool and even temperature of this part of the country and the lack of crowded population are important factors in the maintainence of the present health level.