A Public Health Survey of
Salem, Oregon

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Chapter III

General Descriptive Data

The early history of Salem is intimately bound with the advent of Methodist Missionaries to the Oregon Country. Jason Lee and his band of Missionaries arrived early in 1834 at Mission Bottom, near Wheatland Ferry, 12 miles north of Salem. The location on Mission Bottom was found unsatisfactory, so all moved to what is now Salem. It was originally called "Chemeketa", the Indian name for "Place of Meeting."

Salem, Oregon is now popularly called "The Cherry City" and the "Capitol City". It is also the county seat of Marion County, situated in the heart of the Willamette Valley, 50 miles south of Portland between the Willamette river and the Cascade Range. In 1846 the land was all held by squatters' rights and William H. Wilson was authorized to enter a donation land claim on the present site, later to sell and give titles to lots. The town was platted on the Wilson Donation Land Claim, 320 acres south and 320 acres north of State street in 1848, two years later the town officially becoming known as Salem. In 1851 it became the capital of the territory of Oregon and 9 years later was incorporated as a city. In 1864, by state election Salem was chosen as the Capitol City.
Salem is situated on the main line of the Southern Pacific railway and the Pacific Highway, # 99, and on the banks of the beautiful Willamette river, in the center of the famous Willamette river valley. Aside from Portland it is the chief commercial city and natural distributing point of the valley.

The population according to the 1930 census was 26,266, the present population of the metropolis area 32,000. The citizens of Salem and Marion county are composed largely of second and third generations of pioneer stock, engaged in various agricultural pursuits in the valley land, and lumbering in the more wooded portions. Willamette University, located at Salem, has had a marked influence upon the population, as has also the proximity of the State Normal school, the State Agricultural college, and the State University. Other cities of the county include Gates, Mill City, and Silverton. Charts of the population trends of Salem and Marion county follow on the next page.
Population of Salem and Marion county, Oregon, 1925-35

<table>
<thead>
<tr>
<th>Year</th>
<th>Salem</th>
<th>Marion county</th>
</tr>
</thead>
<tbody>
<tr>
<td>1925</td>
<td>21,969</td>
<td>49,790</td>
</tr>
<tr>
<td>1926</td>
<td>22,827</td>
<td>50,891</td>
</tr>
<tr>
<td>1927</td>
<td>23,680</td>
<td>51,991</td>
</tr>
<tr>
<td>1928</td>
<td>24,543</td>
<td>53,092</td>
</tr>
<tr>
<td>1929</td>
<td>25,401</td>
<td>54,193</td>
</tr>
<tr>
<td>1930</td>
<td>26,266</td>
<td>55,294</td>
</tr>
<tr>
<td>1931</td>
<td>27,124</td>
<td>56,100</td>
</tr>
<tr>
<td>1932</td>
<td>27,982</td>
<td>56,600</td>
</tr>
<tr>
<td>1933</td>
<td>28,840</td>
<td>57,300</td>
</tr>
<tr>
<td>1934</td>
<td>29,698</td>
<td>57,900</td>
</tr>
<tr>
<td>1935</td>
<td>30,556</td>
<td>59,000</td>
</tr>
</tbody>
</table>
Chapter II
Public Health Organization

The public health of a community depends upon the cooperative effort of the city, county, state, and the federal governments, as well as the persistent, unselfish cooperation of the individual, working especially through the non-official health agencies. The municipal health organization is really the very smallest part of the public health program of the community. However, the health organization of the City of Salem, combined as it is in large measure with the Marion County organization is of considerable more value than similar organizations in other communities. The State Board of Health, in turn, is in close communication with and is aided in its work by the Public Health Service of the United States, a Federal agency, under the treasury department. A complete picture of the protection in life and health which each individual of any community enjoys, must include the entire system of public health activities: federal, state, county, city, and also non-governmental or non-official organizations and their activities. A very brief survey of each of these divisions follows.

The Federal Administration

The national government has certain legitimate public health duties, although the care of the public health is primarily the function of the state and its political
subdivisions. In order to prevent the entry into the United States of disease from without, and to avert its spread between the states, the Bureau of the Public Health Service of the United States Treasury Department, is charged with the administration of foreign and domestic quarantine, including among its duties the examination of immigrants and the licensing of biological products shipped in interstate commerce. This bureau under the direction of the Surgeon General also supplies medical aid to certain persons designated by law, conducts research investigations of matters pertaining to the public health, and cooperates with state and local officials. The Bureau of Health is divided into eight administrative divisions as follows:

Division of Scientific Research
Division of Marine Hospitals and Relief
Division of Foreign and Insular Quarantine
Division of Domestic Quarantine
Division of Sanitary Reports and Statistics
Division of Venereal Diseases
Division of Mental Hygiene
Division of Personnel and Accounts

The powers and responsibilities of the government with reference to treaty making, taxation, and the welfare of certain wards of the government, such as the non-citizen Indians and Eskimos, all may involve duties of a public health...
nature; and various governmental bureaus have been set aside
to deal with such problems as they arise. These are distrib-
uted throughout the various departments of government, so
that one must realize that the federal public health admin-
istration is not limited to the Public Health Service of the
Treasury Department.

Department of Labor,
Children's Bureau

Department of Commerce
Division of Vital Statistics of the Census Bureau

Department of the Interior
Medial division of the Office of Indian Affairs
Division of School Hygiene of Office of Education

Department of Agriculture
Food and Drug Administration
Bureau of Animal Industry
Bureau of Dairy Industry
Bureau of Home Economics

In a number of instances, officers of the Public Health Service
are detailed to other departments and Bureaus of the government
to assist in the conduct of Public Health activities. Some of
these bureaus administer certain laws, such as the federal Foods
and Drugs Act, or the Meat Inspection laws, while others conduct
research, collect data, and issue information.

The National Tuberculosis Association, although not part of
the government is a voluntary agency, nation wide in scope, and
of great benefit to the public health. This may also be said of
the Red Cross. Both of these will be mentioned later.

International Agencies with which the United States is
affiliated are the Health Section of the League of Nations, and
the International Office of Public Hygiene.

State Health Administration

The first State Board of Health was established in 1869 in Massachusetts. Since then every state in the union has created a similar Board of Health. The Oregon State Board of Health is appointed by the Governor with the approval of the State Senate. There are seven members on the Board with Dr. Stricker who is the executive secretary and the State Health Officer. The State Health Officer is chosen by the Board and operates under its jurisdiction and authority. As a rule the State Board does not operate locally unless the local authorities neglect to enforce or refuse to enforce the proper laws, rules and regulations to safeguard the people's health. The State Board of Health has power to control all matters relating to the preservation of life and health within the state; to keep vital statistics, and to make sanitary inspections and inquiries regarding the cause and prevention of disease. It is empowered to make quarantine regulations, supervise orphanages and foundling asylums, and make periodic inspections of hospitals and sanatoria, both public and private in the state, and the supervision and inspections and license of day nurseries, tourist camps, and swimming pools. The State Board of Health is divided into a number of divisions of labor. These are very well outlined in the chart on the following page. A brief summary of the scope of the work in each division is given.
1. Division of Vital Statistics
   All deaths, births, infant and maternal deaths, stillbirths, marriages, divorces are recorded, preserved, and properly tabulated and sent to the United States Department of Commerce and the Treasury Department for federal records.

2. Division of Epidemiology
   Enforces proper measures for communicable disease control, the enforcement of quarantine and isolation regulations. Aids in confirming diagnoses, conducts and promotes campaigns of vaccination and inoculation. Receives records of communicable diseases and permanently records and tabulates them. Venereal disease control, health education, and the control of tuberculosis all come under this section.

3. Division of Public Health Nursing and Child Health Hygiene
   Acts as an advisory board to public health nurses; keeps in close contact with public health nurses in the various counties, assisting them in every way possible. Places new nurses in the field. Standardizes the public health nurse's qualifications and methods of work and education of the communities in child and maternal welfare.

4. Division of Sanitary Engineering
   - Supervision and inspection of public water supplies
examination and specifications for new system of supplies, or on major alterations. Inspection of private water supplies, supervision and inspection of public and private sewage disposal plants; supervision, inspection, and rating of swimming pools, tourist camps, shellfish growing areas and their shucking and packing plants, and the inspection of water sheds.

5. Division of Laboratories

Analysis of milk and water and foods. Bacteriological work in aiding and confirming diagnoses. Serological work. Laboratory work in examining food handlers. Research investigations of a public health nature. Epidemiological investigations.

6. Division of Licensure

Inspection and issuance of licenses to embalmers, chiropodists, nurseries, hospitals, and all institutions.

7. Other state functions as regarding health:

State Board of barber examiners

Cosmetic Therapy Examiners

State Board of Dental Examiners

State Board of Medical Examiners

Industrial Accident Commission

State Board of Naturopathic Examiners

State Board of Optometry Examiners

Public Utilities Commission
Chapter III

Local Public Health Activities

The history of public health activities in the region as early as 1916, receiving great impetus through the assistance of the Commonwealth Fund. The invitation to the Commonwealth Fund in 1924 to establish a child health organization for health service which was without equal in the state and which may well be accepted as a pattern for similar development in the Pacific Northwest was made in 1924. However, long before this time, leading citizens of Marion County had shown a real interest in the public health problems of their community, particularly those relating to infants and school children. The Salem Board of Education with the aid of the women's clubs in 1916 established school nursing service which was taken over entirely by the Board of Education the following winter. Marion County Child Health Bureau was organized by a group of women in 1919. Under the auspices of this body Child welfare clinics were held in Salem and the rural parts of the county with the cooperation of local physicians.

In 1920, this organization became the Marion County Public Health Association and was affiliated with the state organization. School medical inspection was provided for school children by part time arrangements with local physicians. A county health officer served rural parts of
the county on a part-time basis and another physician acted as part-time health officer in Salem. Aware of the fact that communicable diseases, particularly smallpox and diphtheria, were more prevalent and created a higher mortality than they should, the child health demonstration was established in 1925, through invitation to the Commonwealth Fund.

In the year a demonstration program was organized to aid the county and city health officers, school physician and nurse, the Salem city sanitary inspector. Later milk control service and clinical activities for child hygiene, tuberculosis and venereal diseases were added. In the same year an impending epidemic of smallpox made the people realize the need for centralization of responsibility and control in planning a public health program. Thus the director of the demonstration was appointed county health officer with full authority over the county and city of Salem.

The demonstration was supported by a number of local agencies combined with the Commonwealth Fund. Previous to this alliance the budget for public health work amounted to $6,375 and was derived from local sources. However, as the demonstration progressed the amount was increased until in 1929, a local support of $21,965 was
combined with $28,851 from the Commonwealth Fund, making a total of $50,816 for public health activities. At that time the staff included a full-time health officer, a director of medical services, a sanitary inspector, a statistician, 8 public health nurses, a dentist, and 6 clerks in addition to the administrative staff of the demonstration. However, during the recent depression the budget was reduced, though still maintaining a full time medical health officer, 5 nurses, 2 sanitary inspectors, 1 clerk and some part-time medical and dental service provided by private physicians and dentists.

Though the staff was not drastically reduced, reductions in salaries and operating costs were necessary to keep expense within these budget limitation. A slight increase in budget accrued in 1934 raised it to $18,657 which was further extended in 1935 and 1936.

The following is a brief summary of such activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Individual interviews (business)</td>
<td>2022</td>
</tr>
<tr>
<td>Individual interviews (organization)</td>
<td>230</td>
</tr>
<tr>
<td>Meetings (business)</td>
<td>52</td>
</tr>
<tr>
<td>Meetings (organization)</td>
<td>22</td>
</tr>
<tr>
<td>Professional meetings or talks</td>
<td>85</td>
</tr>
<tr>
<td>Voluntary lay hours</td>
<td>1014</td>
</tr>
<tr>
<td>Voluntary professional hours</td>
<td>129</td>
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</table>
Marion County Public Health Assn.

**Receipts:**

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<th></th>
<th>Budget</th>
<th>Actual</th>
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<tr>
<td></td>
<td>$21,253.43</td>
<td>21,364.35</td>
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<tr>
<td><strong>Bal</strong></td>
<td></td>
<td><strong>$110.92</strong></td>
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**Expenditures:**

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<th></th>
<th>Budget</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$21,253.43</td>
<td>20,475.57</td>
</tr>
<tr>
<td><strong>Bal</strong></td>
<td></td>
<td><strong>$777.86</strong></td>
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**Total Balance (1935)** $338.78

**Financial Statement 1935**
Marion County Public Health Assn.

Received from:

<table>
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<tr>
<th>Organization</th>
<th>Amount</th>
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<tbody>
<tr>
<td>General Fund</td>
<td>$1178.00</td>
</tr>
<tr>
<td>Marion County</td>
<td>6731.00</td>
</tr>
<tr>
<td>Salem City</td>
<td>5400.00</td>
</tr>
<tr>
<td>Salem School Board</td>
<td>5600.00</td>
</tr>
<tr>
<td>Silverton School Board</td>
<td>1280.00</td>
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<tr>
<td>Marion County Public Health Assn.</td>
<td>1000.00</td>
</tr>
<tr>
<td>Gates School Board</td>
<td>225.00</td>
</tr>
<tr>
<td>Silverton City</td>
<td>160.00</td>
</tr>
<tr>
<td>Mill City School Board</td>
<td>450.00</td>
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Total $22,024.00

Expenditures:

<table>
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<th>Category</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Health Officer and School Phys.</td>
<td>$3600.00</td>
</tr>
<tr>
<td>Medical Service</td>
<td>600.00</td>
</tr>
<tr>
<td>Dental Service</td>
<td>500.00</td>
</tr>
<tr>
<td>Dairy and Food Inspector</td>
<td>1700.00</td>
</tr>
<tr>
<td>Nurses</td>
<td>7200.00</td>
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<tr>
<td>Clerks</td>
<td>1800.00</td>
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</tbody>
</table>

Subtotal $15400.00

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Operating costs--</td>
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<tr>
<td>Transportation</td>
<td>$3250.00</td>
</tr>
<tr>
<td>Laboratory</td>
<td>500.00</td>
</tr>
<tr>
<td>Rent and Maintenance</td>
<td>1185.00</td>
</tr>
<tr>
<td>Printing and postage supplies</td>
<td>1325.00</td>
</tr>
<tr>
<td>General</td>
<td>384.00</td>
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</table>

Subtotal $6624.00

Total $22,024.00

Financial Budget - 1936
Chapter IV

Local Public Health Organization

Representatives from appropriating bodies compose the executive committee which per se has no legal status but is a cooperative arrangement. It, however, appoints the Marion county and the Salem city health officer in whom is vested the legal authority.

These contributing agencies include Marion county, City of Salem, Salem School Board, Silverton School Board, Marion County Public Health Association, Gates School Board, Mill City School Board, and the City of Silverton. This board meets once a month.

Present members include:

D.H. Upjohn—Marion County Public Health Assn.
Judge J.C. Siegmund—Marion County
W.D. Evans—Salem City
Mrs. D.B. Wright—Salem School Board
E.W. Garver—City of Silverton
Robert Goetz—Silverton School Board
Dr. W.H. Allen—Mill City School Board
Ferd Jones—Gates School Board

The present health officer for Marion County and the City of Salem is Dr. Berg, who assumed office September 1, 1936. His predecessor was Dr. Vernon A. Douglas who served in the same capacity during the
demonstration service under the Commonwealth Fund.

Function of the full time health department under the control of the health officer may be outlined as set forth in the discussion of the work of the demonstration in the first five years of full time health activity in this county:

1. To rid the environment in which people live of conditions which are likely to cause disease, especially by guarding milk, water, and food supplies from contamination and by securing the clean and safe disposal of human wastes.

2. To guard against epidemics, by preventing so far as possible the occurrence of the disease which cause them and by holding them closely in check when they do occur.

3. To encourage the public to take advantage of preventive medicine as a means of building up health and warding off disease. The cornerstone of preventive medicine is in the periodic medical examination.

4. To educate the public in healthful living, through general publicity and especially through the nurses, who teach health in the homes, and the teachers, who guide children at school.

5. To keep accurate tally of births, deaths, and diseases, so that the community is aware of its gains its losses, and the point at which its safety is threatened.

The accompanying chart on the following page helps to outline these activities more clearly.

Chapter V.

Control of Communicable Diseases

Reporting of communicable diseases is compulsory in the State of Oregon. Section 8 under the rules and regulations of the Oregon State Board of Health reads as follows:

Reporting Communicable Diseases.

A. It shall be the duty of all physicians, and all other persons practicing the art of healing of human beings, and all persons having the care of human beings affected with communicable diseases, including heads of households, immediately on the development of a communicable disease so as to show its nature, to report to the local health officer in whose jurisdiction such sick person may be located in the manner required by the rules and regulations of the State Board of Health and upon blanks supplied by such Board, the name and address of any person afflicted with such disease and such other information as may be required by the State Board of Health. It shall be the duty of any person required to make such report to procure from the County Health Officer a blank furnished by the State Board of Health for the making of such a report, and or to make such report in writing and furnish therein the information required by the State Board of Health.

B. (The report must be made within 24 hours after the diagnosis, &c.)

C. The report shall be confirmed in the written weekly report to the county health officer in counties in which there is a full time officer, in all other cases to the State Board of Health. Physicians will be furnished with weekly report blanks.

D. The jurisdictional health officer shall record all cases of communicable diseases in a book provided for that purpose.

E. The following information is required for the protection of the public health:
   a. Name of the disease or the suspected diseases
   b. Name of the patient
   c. Address of the patient
   d. Race, Sex, and Age.
Marion county health department's program in this field has emphasized the importance of case reporting to a central agency followed by field investigation and supervision. In 1924, it mattered little in the incidence of cases in the county whether a particular case was reported or not. The entire control program was left to the judgment of the attending physician who must, of necessity, view the matter of restriction and control practice more directly in relation to his particular patient than to the community. At present, however, cases are reported by the physician directly to the health department. Report is made by postcard or telephone in the case of the more importance acute communicable diseases, and by weekly reports for the minor contagious and other less acute conditions.

Cases of diphtheria, typhoid fever, smallpox, and chickenpox in adults, are investigated by the health officer personally. Other cases are referred to the nursing staff which also carries the responsibility for subsequent follow-up. When the communicable disease incidence permits it, the health officer also assumes responsibility for making the initial investigation of cases of scarlet fever. The department maintains a diagnostic service and will, at the request of the physician, or at the request of the family if there is no physician, make a diagnostic visit to a case. Wherever possible, such cases are gotten under private medical supervision as early as possible. Wherever family circumstances are such that they cannot per-
sonally provide it, the department will provide antitoxin for the treatment of cases of diphtheria and a similar specific for especially severe cases of scarlet fever.

The department's immunization program has thus far been concentrated upon diphtheria and smallpox. In this connection, it is interesting to note that both services had to be developed during the demonstration and postdemonstration periods. At the close of the demonstration, there were more school children protected against diphtheria than smallpox. In subsequent years, however, this situation has been reversed. Immunizations of preschool children by the health department showed marked progress from 1927 to 1932, the percentage increasing by year from 6.8 per cent in 1927 to 9.4 in 1928, 11.4 in 1929, 19.0 in 1930, 21.7 in 1931. In 1932, 1933, and 1934, the total immunizations by the department dropped slightly and the percentage of preschool children protected has likewise slipped. There is no doubt that a considerable number of immunizations are being performed by private physicians and that more have been done in the past few years than were done in the years 1927 and 1928. It is likely that those done by private physicians might increase the percentage of preschool population protected from 18 to 21 or 22 per cent. It is obvious that the leadership for this service and the stimulation of it still rests with the health department and must for some time.

At present only 67.5 per cent of the school children are vaccinated against smallpox. Although this is a considerable increase from 57 per cent at the end of the demonstration, it is
not as large a percentage as is found in many other areas and should, it is believed, be increased. This activity should continue to be a responsibility of the health department and vaccination should be urged at every opportunity.

The immunization program of the department has recently been extended to scarlet fever. A small number of susceptible children in one community have been protected. In 1934, over 200 children were Dick tested and the 39 found susceptible were subsequently immunized.

Consideration should not be given to measles as one of the more important problems in the acute communicable diseases. The average number of deaths per year from this cause has been higher than typhoid fever, scarlet fever, whooping cough, or diphtheria, for the past five years. At least one of the pediatricians is protecting susceptible children in selected cases against this disease. The service should be encouraged and extended by the health department as rapidly as public and professional acceptance of this procedure will permit. Consideration should be given to the use of whole blood and immune serum as well as placental extract.
The following statistics give some idea as to the activities of the Marion County Health Department in regard to communicable disease control and immunization programs.

### Field Visits

<table>
<thead>
<tr>
<th>Disease</th>
<th>Visits</th>
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</thead>
<tbody>
<tr>
<td>Diphtheria</td>
<td>7</td>
</tr>
<tr>
<td>Measles</td>
<td>61</td>
</tr>
<tr>
<td>Scarlet Fever</td>
<td>966</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>78</td>
</tr>
<tr>
<td>Whooping cough</td>
<td>68</td>
</tr>
<tr>
<td>Others</td>
<td>551</td>
</tr>
<tr>
<td>Diagnostic visits</td>
<td>74</td>
</tr>
</tbody>
</table>

### Immunizations

<table>
<thead>
<tr>
<th>Disease</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diphtheria (under 5)</td>
<td>324</td>
</tr>
<tr>
<td>Diphtheria (over 8)</td>
<td>576</td>
</tr>
<tr>
<td>Shick</td>
<td>52</td>
</tr>
<tr>
<td>Smallpox</td>
<td>1312</td>
</tr>
<tr>
<td>Typhoid fever</td>
<td>78</td>
</tr>
<tr>
<td>Scarlet fever</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>21</td>
</tr>
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</table>
Diphtheria Morbidity 1926 - 1935
Salem and Marion County
per 100,000 population
Scarlet Fever
Morbidity 1930-35
Salem and Marion County
Rate per 100,000

Scarlet Fever Mortality 1920-34
Marion County and State of Oregon
Rate per 100,000 pop.
Whooping Cough Mortality 1925-35
Salem and Marion County
Rate per 100,000 pop.
Measles Morbidity 1925-35
Salem and Marion County
Rate per 100,000 pop.
Typhoid Fever Morbidity—1925-35
Salem and Marion County
Rate per 100,000 pop.
Chapter VI
Tuberculosis Control

Though the state sanatorium for the treatment of tuberculosis is located in Marion County in close proximity to Salem, no organized service for the diagnosis and medical and nursing supervision of this disease was established prior to the organization of the demonstration. Clinic services were not adequately set up until 1929.

The trend of the development of this service is well reflected in the number of known cases of pulmonary tuberculosis registered with the health department. In 1929, though 53 new cases were reported that year, there were only 50 known living cases in the county. In 1930 this number was increased to 67 and to 101 in 1931. In 1934, there were 119 known living cases in the county and only 30 new cases reported during that year. That reporting is still incomplete is shown by the fact that 6, or 20%, of these new cases were reported by death certificate. Obviously, there is a considerable educational job to be done with the public and also the physicians in stimulating early recognition of tuberculosis and reporting of positive cases to health department for follow-up of contacts.

With the aid of the medical service of the state sanatorium, excellent clinic facilities for diagnosis have been developed in the county. Cases may apply directly to the clinic for examination, or may be referred by a physician, or may be reached either
through the follow-up of contacts of known cases or the routine
tuberculin testing of children. The clinical service at the present
consists of the preliminary tuberculin test of every individual,
followed by sputum examination where possible. On all individuals
on which the tuberculin test is positive or where the sputum
examination is positive, a preliminary history is made of the case
he
and is referred to the sanatorium for fluoroscopic examination.

If this should also prove suspicious or positive, he is given both
x-ray and physical examination to complete the diagnosis. Special
tuberculosis histories are not made on all children having positive
tuberculin test but only for those in which there is some additional
reason for suspecting active tuberculosis. The positive fluoroscopic
examination and subsequent x-ray findings, if any, are referred to
the private physician for all cases who have a regular physician.

In the event that the case does not have a physician, a plan of
treatment is advised by the sanatorium staff and the case is followed
up by the nursing staff of the health department. In those instances
where institutional care seems advisable, application for this care
is made by the attending physician, usually through the health
department office. Of the 504 cases who were registered within the
clinic in 1935, 10 were found positive, 4 still in the minimal stage

The department aims to give every school child in the county
an opportunity to be tuberculin tested. In 1924, 4,854 children
took advantage of this opportunity and in the last three years over
9,000 children of Marion County have been tested. Roughly 10 per
cent of those tuberculin tested in 1934 reacted positively and this
MARION COUNTY DEPARTMENT OF HEALTH

Tuberculin Tests

To Parents:

Tuberculin tests are now being arranged for all children whose parents desire it. This is a simple harmless skin test which tells whether the child has been exposed to tuberculosis. Tuberculosis, of course, cannot develop unless there has been an actual exposure. Comparatively few children give positive tests in this county.

A fluoroscopic examination (x-ray) will be arranged for those who are found to be positive.

If you wish your child tested, will you please sign below and return to the teacher.

Parent's Signature________________________________________Address_________________________

Child's Name_________________________________________School________________________Age

_________________________Grade________________________

Date of Test_________________________19________________Result________________________

number was subsequently fluoros科普ed and where necessary special tuberculosis histories and x-ray examinations were made. The number of positive reactors ranged from one per cent in the lower grades to as high as 17 per cent in the upper grades. The adults who have been reached in this program show about 30 per cent positive reactions. It is interesting that the county health department is rapidly becoming recognized as the county-wide agency for tuberculin testing and private physicians are referring their cases to the department for this service. The school teachers of Salem and Silverton and of a few of the county school were tuberculin tested when the school children were done. The teachers showing a positive tuberculin reaction have been fluoros科普ed and if necessary x-rayed at the sanatorium. One active case of tuberculosis was found among this group.

The sanatorium provides the institutional care for the patients of the county. Twenty-one cases were admitted during 1934, 15 of these were adults and 6 children. Two other cases were admitted for special observation but proved to be non-tuberculous. Nineteen per cent of the cases in the sanatorium in 1934 were minimal cases on admission.

The nursing service is provided by the health department and reached 68 diagnosed cases and 319 contacts in 1934. This service, at the moment, is primarily supervisory and instructive. It includes supervision of cases who have formerly been patients at the
sanatorium.

A large part of the success of the tuberculosis program is due no doubt to the endorsement of this work, particularly the program of the tuberculin testing, by the advisory committee of the medical society and the cooperation of the local public health and tuberculosis association which, through its funds, provides for the cost of x-ray films which cannot otherwise be provided. The whole program centers around the leadership of the superintendent of the state sanatorium.

The following statistics showing the activities of Marion County in tuberculosis control during 1935 are interesting:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field visits to positive cases</td>
<td>297</td>
</tr>
<tr>
<td>New positive cases</td>
<td>45</td>
</tr>
<tr>
<td>Field visits to contacts or suspects</td>
<td>627</td>
</tr>
<tr>
<td>Visits to post-sanitarium cases</td>
<td>37</td>
</tr>
<tr>
<td>New contact cases under supervision</td>
<td>242</td>
</tr>
<tr>
<td>Clinic visits</td>
<td>174</td>
</tr>
<tr>
<td>New clinic cases</td>
<td>107</td>
</tr>
<tr>
<td>New positive cases diagnosed in clinic</td>
<td>16</td>
</tr>
<tr>
<td>Tuberculin tests</td>
<td>2405</td>
</tr>
<tr>
<td>Tuberculin tests pos reactions</td>
<td>286</td>
</tr>
<tr>
<td>New cases hospitalized</td>
<td>19</td>
</tr>
<tr>
<td>Incipient cases (positive)</td>
<td>6</td>
</tr>
<tr>
<td>New cases under 16 years</td>
<td>4</td>
</tr>
</tbody>
</table>
**TUBERCULOSIS CONTACT**

Name __________________________________________ Address ________________________________

(Surname) __________________________________________

Occupation __________________________________________ Place ___________________________

Date of Birth ________________________________________ M.F.  S.M.W.P.  Physician

Probable Source of Infection: __________________________

<table>
<thead>
<tr>
<th>Tuberculin Tests:</th>
<th>Date</th>
<th>Sputum Samples:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Result</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

History & Physical Findings:

Temperature Readings:
Individual Record of Tuberculin Test

1. Name........................................................................ 2. Place........................................................................
3. Color...................................................... 4. Sex.................................................. 5. Date of Birth...................................................
6. Country of birth................................................................
7. Country of birth (a) of mother (b) of father
8. Contact or non-contact with tuberculosis
9. If contact, specify (a) through whom (b) whether past or present
10. (a) Date of 1st injection (b) Result
11. (a) Date of 2nd injection (if given) (b) Result
12. (a) Date of 3rd injection (if given) (b) Result

A copy of this report for each child tested should be sent to the National Association, 450 Seventh Avenue, New York City, for their statistical study.

N.T.A., Jan., 1934
Date________________________

This is to report that your fluoroscopic examination at the State Tuberculosis Hospital on ____________19________ revealed no evidence of active tuberculosis. If you have any questions regarding tuberculin tests or tuberculosis, do not hesitate to call on us at any time.

Marion County Department of Health
206 Masonic Building
Salem, Oregon

TUBERCULIN TEST

Name __________________________ Date __________________________

Address ____________________________________________________

On __________________________ Look at the place on your arm where the tuberculin test was given and draw a circle the size of the red mark here:

Then place card in the mail.

Vernon A. Douglas, M.D.
County Health Officer
<table>
<thead>
<tr>
<th>Name</th>
<th>Tuberculosis (Type)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>Age</td>
</tr>
<tr>
<td>Occupation</td>
<td>Place</td>
</tr>
<tr>
<td>Resident of Marion County Since</td>
<td>Former Residences</td>
</tr>
<tr>
<td>Suspected Source of Disease</td>
<td>Dates of Exposure</td>
</tr>
<tr>
<td>Date of First Diagnosis</td>
<td>By Dr.</td>
</tr>
<tr>
<td>Previous Treatments (Home, San., Etc., with Dates)</td>
<td></td>
</tr>
<tr>
<td>CONTACTS</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Age</td>
</tr>
<tr>
<td>------</td>
<td>---</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLERICAL: Report Received</th>
<th>By Dr.</th>
<th>To State Bd Hth.</th>
<th>Final Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCHD 7-1-55-250</td>
<td>(Date)</td>
<td>(Date)</td>
<td>(Date)</td>
</tr>
</tbody>
</table>
Chapter VII

Venerable Disease

The administration of the venerable disease control work is carried out by the Marion County health officer. A clinic, established in 1929, is held in the offices of the health department each Friday afternoon. Patients requiring additional treatment are seen by appointment at other times. During the year of 1935 the clinic had registered with it cases, of whom are cases of syphilis, and cases of gonorrhea. While the bulk of the cost of the clinic is carried by the regular health department budget, patients who can afford to are asked to contribute something to cover the cost of their treatment. By paying 25¢ to $1.00 each about $250.00 is collected during the year.

Clinic service is available for the diagnosis and emergency treatment of any person that applies, for patients referred by private physicians for consultation or continued treatment, and for any patient unable to afford private medical care. For persons living in rural communities treatment will be supplied to local physicians providing they wish to give it although most patients find it easy to call at the central office. Though many cases are referred by private physicians to the clinic for treatment because the physicians do not care to handle them, a considerable number come in directly for diagnosis and subsequent treatment. In addition numerous cases are picked up in the routine examination of milk and food handlers. The great majority of cases are in the secondary stage. The clinic is operated in such a manner that the other visitors to the department do not know the reason for the patients' visit and every means is taken to save him
embarrassment.

Although there is a private laboratory in Salem which runs darkfield examinations for physicians, all the darkfield and blood serologic work is sent to the state laboratory in Portland, from the Marion County office. This necessitates the use of the indirect or capillary tube method. There are no facilities at the health department for the use of the lumbar puncture although this is an essential procedure in the management of syphilis. What is needed is a room or rooms and nursing service which may later be worked out arrangement with one of the local hospitals. Gram stains are routine on all cases of suspected gonorrhea.

The prevention of the prenatal transmission of syphilis is left entirely to private physicians as the health office handles very few maternity cases. The extent to which blood serologic tests are done on pregnant women is therefore not known, for this area. At the present time the health office has about three families with altogether five cases of congenital syphilis. Physical examination for marriage licenses require only gross inspection of the applicant and no blood tests.

Epidemiologic work of the health department includes the investigation of contacts of the early infectious case and the follow up of patients lapsed from treatment. This includes of course the investigation of familial contacts in all cases, early or late. Eighteen field visits were required and eleven contacts or suspects discovered during 1935. Cases handled by private physicians are also subjected to this work.
The following statistics give an estimate as to activities of venereal disease control:

- Field visits: 18
- New cases under supervision: 10
- Clinic visits: 1301
- Clinic treatments: 912
- New clinic cases: 907
- Contacts or suspects: 11
- Discontinued cases: 8
- Treatments supplied to private physicians: 54
The health department cooperates with private physicians by furnishing free diagnostic service (providing the patient is no charged for this), and by the distribution of antisyphilitic drugs to physicians for the treatment of private patients free of charge or with a small charge if the patient is able to pay. Materials for 54 treatments were supplied to private physicians in 1935.

Morbidity and mortality reports give data regarding total prevalence of syphilis and gonorrhea but apparently do not give figures in relation to the stage or chronicity of these infections, the distribution of cases according to age and sex, the prevalence of syphilis in pregnant women, of gonorrheal vulvovaginitis (of which there are several cases), the relationship between marriage and venereal diseases or the time interval between infection and the beginning of treatment. Morbidity reports include a place for the name of the patient although this is not required.

Educational program consists of the distribution of pamphlets giving essential information regarding syphilis and gonorrhea. These are distributed at the health office to anyone inquiring for information. Lectures on venereal disease were also given. The words "syphilis" and "gonorrhea" only recently made their appearance in local newspapers in one or two editorials following the leadership of Surgeon General Parran. A recent article on The Scourge of Mankind: The Story of Syphilis: Modern medical science affirms that public understanding and cooperation are needed to curb the toll of menacing disease: Was printed on the front page of a Sunday section of a Portland newspaper which is distributed widely in Marion County. These are distinct advances in public education.
<table>
<thead>
<tr>
<th>Disease</th>
<th>Name of Patient</th>
<th>Address—P. O. or Street</th>
<th>Race</th>
<th>Sex</th>
<th>Age</th>
</tr>
</thead>
</table>

Date ........................................

Please list above your cases of reportable diseases for the past week. Mail immediately. If you have had none, please return card just the same.

UNITED STATES PUBLIC HEALTH SERVICE
In cooperation with
OREGON STATE BOARD OF HEALTH

Venereal Disease Report

Physician's case No. Address of patient

Age ...... Sex ...... Color ...... Occupation ......

Nature of infection:

- SYphilis
  - Primary
  - Secondary
  - Ter. and Latent
  - Congenital
- Gonorrhea
- Acute
- Chronic
- CHANCROID
- Ophthal. Neo.

Source of patient's infection: Name Address

Date Reported by M. D.

Address
Chapter VIII

Vital Statistics

Vital Statistics are facts having to do with the origin, continuation, and termination of life. They may be classified into:
- Population statistics
- Birth Statistics
- Death Statistics
- Marriage Statistics
- Disease Statistics

Births and deaths in Marion county are reported to the local registrar by the attendant at delivery and at death. The county health officer is the registrar for the city of Salem and the territory immediately adjoining it. Nine other registrars are distributed over the rural parts of the county. The registrars in the rural areas send certificates of birth and death at the end of each month to the county health department.

The clerk in the county health department makes a copy of each certificate thus filed; the copies are later bound in a book and kept in the department. Certain information is also copied on birth and death index cards which are used for the current purposes of the department. The original certificate is subsequently sent to the state department of health for analysis and for final filing. In the state department,
<table>
<thead>
<tr>
<th></th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
</tr>
</thead>
<tbody>
<tr>
<td>Born in Hosp.</td>
<td>244</td>
<td>287</td>
<td>306</td>
<td>293</td>
<td>227</td>
<td>391</td>
<td>405</td>
</tr>
<tr>
<td>Midwife</td>
<td>21</td>
<td>30</td>
<td>9</td>
<td>7</td>
<td>20</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Resid. (Salem)</td>
<td>324</td>
<td>303</td>
<td>304</td>
<td>276</td>
<td>304</td>
<td>315</td>
<td>294</td>
</tr>
<tr>
<td>Resid. (Rural)</td>
<td>438</td>
<td>523</td>
<td>564</td>
<td>524</td>
<td>463</td>
<td>496</td>
<td>563</td>
</tr>
</tbody>
</table>

Record of Births (Salem) 1929 - 1935
Live Birth Rates 1929 - 1935
Salem and Marion County
per 1,000 births
1. PLACE OF STILLBIRTH

County of .................................................................
Township or .............................................................
Village of .................................................................
City of .................................................................
Street and Number, No. ..............................................

2. NAME OF CHILD

3. Sex of child ............................................................

4. Twin, triplet, or other plural births. Number, in order of birth

5. Legitimacy: ............................................................

6. Date of stillbirths (Month) (Day) (Year)

FATHER

7. Full name ............................................................

8. Residence (usual place of abode)
   (If nonresident, give place and State) .........................

9. Color or race ........................................................

10. Age at last birthday (years) ....................................

11. Birthplace (city or place)
    (State or country) ................................................

12. Trade, profession, or particular kind of work done, as spinner, sawyer, bookkeeper, etc. ............................................................

13. Industry or business in which work was done, as silk mill, sawmill, bank, etc. ............................................................

14. Date (month and year) last engaged in this work ............................................................

15. Total time (years) spent in this work ............................................................

16. Full maiden name ..................................................

17. Residence (usual place of abode)
   (If nonresident, give place and State) .........................

18. Color or race ........................................................

19. Age at last birthday (years) ....................................

20. Birthplace (city or place)
    (State or country) ................................................

21. Trade, profession, or particular kind of work done, as housekeeper, typist, nurse, clerk, etc. ............................................................

22. Industry or business in which work was done, as own home, lawyer's office, silk mill, etc. ............................................................

23. Date (month and year) last engaged in this work ............................................................

24. Total time (years) spent in this work ............................................................

25. (a) Number of children of this mother, born alive and now living ............................................................

(b) Number of children of this mother, born alive but now dead ............................................................

(c) Number of children of this mother, stillborn, including this child ............................................................

MOTHER

26. Signature of informant ................................................

27. Address ............................................................

CERTIFICATE OF ATTENDING PHYSICIAN OR MIDWIFE

28. I hereby certify that I attended the birth of this child, which was born dead
   (Month) (Day) (Year) ............................................................
   M. ............................................................
   (Before labor or)

29. Period of utero-gestation (Months) ............................................................

30. Cause of stillbirth ..................................................

31. Signature of attendant
    M.D. ............................................................
    Midwife ............................................................

32. Address ............................................................

CERTIFICATE OF UNDERTAKER

33. Place of burial or removal ............................................................

34. Date of burial (Month) (Day) (Year) ............................................................

35. Signature of Undertaker ................................................

36. Address of Undertaker ................................................

37. Date filed ............................................................

38. ............................................................

Registrar ............................................................

CERTIFICATE OF ATTENDING PHYSICIAN OR MIDWIFE*

27. Number of children of this mother
   (Taken as of time of birth of child herein certified and including this child)
   (a) Born alive and now living ............................................................
   (b) Born alive but now dead ............................................................
   (c) Stillborn ............................................................

28. I hereby certify that I attended the birth of this child, who was born alive at
   on the date above stated ............................................................
   M. ............................................................
   (Before labor or)

29. Signature ............................................................

30. Address ............................................................

(Physician or midwife) ............................................................

Registrar ............................................................

* When there was no attending physician or midwife, then the father, householder, etc. should make this return. A stillborn child is one that neither breathes nor shows other evidence of life after birth.

Given name added from a supplemental report (Month, day, year) ............................................................

Registrar ............................................................

Filed ............................................................

Registrar ............................................................

STATE OF OREGON
State Board of Health—Division of Vital Statistics
CERTIFICATE OF STILLBIRTH

State Registered No. ............................................................
Local Registered No. ............................................................

St.; Ward; Hospital ............................................................

(If stillbirth occurred in hospital or institution, give its name instead of street and number) ............................................................
THE UNITED STATES OF AMERICA

DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
WASHINGTON

Notification of Birth Registration

This certifies that the following Record of Birth is registered and preserved in the office of the Registrar of Vital Statistics at Marion County Department of Health Salem, Oregon

Name ____________________________ Sex ________ No. ________
Date of Birth ______________ Place of Birth ____________________
Name of Father ____________________
Maiden name of Mother ______________

W. L. Austin, Director of the Census

Frederick V. Strickler, Special Agent, Bureau of the Census
### Oregon State Board of Health

#### Certificate of Death

**1. PLACE OF DEATH**
- County: ____________________________
- State: ____________________________
- Township: ____________________________
- or Village: ____________________________
- City: ____________________________
- No.: ____________________________
- St.: ____________________________
- Ward: ____________________________

**2. FULL NAME**
- (a) Residence: No.: ____________
- (Usual place of abode): St.: ____________
- (If nonresident, give city or town and state): ____________

**PERSONAL AND STATISTICAL PARTICULARS**

<table>
<thead>
<tr>
<th>SEX</th>
<th>COLOR OR RACE</th>
<th>SINGLE, MARRIED, WIDOWED OR DIVORCED</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Write the word)</td>
</tr>
</tbody>
</table>

**3. DATE OF BIRTH (month, day and year)**

<table>
<thead>
<tr>
<th>AGE</th>
<th>Years</th>
<th>Months</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**4. TRADE, PROFESSION, OR PARTICULAR KIND OF WORK DONE, AS SPINNER, SAWER, BOOKKEEPER, ETC.**

**5. OCCUPATION**

<table>
<thead>
<tr>
<th>OCCUPATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**6. DATE DECEASED LAST WORKED**

<table>
<thead>
<tr>
<th>(At this occupation)</th>
<th>(Month and year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**7. BIRTHPLACE (city or town)**

<table>
<thead>
<tr>
<th>(State or country)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**8. NAME**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**9. BIRTHPLACE (city or town)**

<table>
<thead>
<tr>
<th>(State or country)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**10. INFORMANT**

<table>
<thead>
<tr>
<th>(Address)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</table>

**11. BURIAL, CREMATION OR REMOVAL**

<table>
<thead>
<tr>
<th>Place</th>
<th>Date</th>
<th>Undertaker</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**12. MAIDEN NAME**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**13. MOTHER FATHER**

<table>
<thead>
<tr>
<th>Name</th>
<th>Date of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**14. CONTRIBUTORS TO IMPORTANT NOT RELATED TO PRINCIPAL CAUSE**

<table>
<thead>
<tr>
<th>Name of operation</th>
<th>Date of Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**15. WHERE DID INJURY OCCUR?**

<table>
<thead>
<tr>
<th>(Specify city or town, county, and state)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**16. MANNER OF INJURY**

<table>
<thead>
<tr>
<th>Nature of Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**17. WERE THERE ANY EXPOSURES, EXPOSURES, EXPOSURE TO OCCUPATIONAL OR INDUSTRIAL DISEASES?**

<table>
<thead>
<tr>
<th>If so, specify</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**18. LOCAL REGISTERED NO.**

<table>
<thead>
<tr>
<th>State Registered No.</th>
<th>Local Registered No.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**19. MEDICAL CERTIFICATE OF DEATH**

<table>
<thead>
<tr>
<th>DATE OF DEATH (month, day, and year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**20. SIGNATURES**

<table>
<thead>
<tr>
<th>(Signed)</th>
<th>M. D.</th>
<th>(Address)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**N.B.—WRITE PLAINLY. WITH UNFADING INK. THIS IS A PERMANENT RECORD. Every item of information should be carefully supplied. A free space should be left for any additional details.**

**MARGIN RESERVED FOR BINDING**

**N.B.—WRITE PLAINLY. WITH UNFADING INK. THIS IS A PERMANENT RECORD. Every item of information should be carefully supplied. A free space should be left for any additional details.**

**MARGIN RESERVED FOR BINDING**
Total Deaths in Salem
(1929 - 1935)
copies are made and returned to the county clerk's office in Salem. Checking of birth reports against subsequent deaths of infants and through other channels indicates that birth reporting is practically 100 per cent in this county. The birth and death index cards are used by the department for the analysis of their vital statistics and also in locating certificates when requests are made for certified copies. All certificates upon arrival at the county health department office are checked for completeness and consistency of information. Any errors or omissions are called to the attention of the local registrar or physician who is requested to correct the same and complete the report.

Death certificates are classified according to the International List of Causes of Death and vital statistics tables are made showing the deaths from important causes. The last published available causes of death gives the following list in order of frequency:

- Heart disease
- Kidney disease
- Cancer disease
- Apoplexy
- Pneumonia
- Accidents
- Tuberculosis
- Other communicable diseases
- Auto accidents
- Influenza
<table>
<thead>
<tr>
<th>Condition</th>
<th>1925</th>
<th>1926</th>
<th>1927</th>
<th>1928</th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Disease</td>
<td>32</td>
<td>43</td>
<td>46</td>
<td>61</td>
<td>45</td>
<td>57</td>
<td>47</td>
<td>76</td>
<td>74</td>
<td>47</td>
<td>68</td>
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<tr>
<td>Cancer</td>
<td>24</td>
<td>18</td>
<td>21</td>
<td>33</td>
<td>18</td>
<td>22</td>
<td>36</td>
<td>27</td>
<td>27</td>
<td>42</td>
<td>28</td>
</tr>
<tr>
<td>Kidney</td>
<td>19</td>
<td>15</td>
<td>25</td>
<td>32</td>
<td>21</td>
<td>28</td>
<td>25</td>
<td>26</td>
<td>21</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>Apoplexy</td>
<td>7</td>
<td>22</td>
<td>26</td>
<td>28</td>
<td>21</td>
<td>14</td>
<td>28</td>
<td>25</td>
<td>18</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>9</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Auto Acc.</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Maternal</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Typhoid Fever</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diphtheria</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Scarlet Fever</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Measles</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Whooping Cough</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Chart showing the Causes of Death in Salem
(1925 - 1935)
<table>
<thead>
<tr>
<th></th>
<th>1929</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
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</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>11</td>
<td>10</td>
<td>11</td>
<td>10</td>
<td>12</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Apoplexy</td>
<td>78</td>
<td>44</td>
<td>64</td>
<td>60</td>
<td>49</td>
<td>60</td>
<td>56</td>
</tr>
<tr>
<td>Ht. Dis</td>
<td>124</td>
<td>137</td>
<td>145</td>
<td>170</td>
<td>158</td>
<td>142</td>
<td>174</td>
</tr>
<tr>
<td>Kidney</td>
<td>75</td>
<td>62</td>
<td>62</td>
<td>71</td>
<td>67</td>
<td>67</td>
<td>56</td>
</tr>
<tr>
<td>Auto Acc</td>
<td>6</td>
<td>15</td>
<td>14</td>
<td>23</td>
<td>19</td>
<td>21</td>
<td>16</td>
</tr>
<tr>
<td>Other Acc</td>
<td>28</td>
<td>28</td>
<td>27</td>
<td>24</td>
<td>30</td>
<td>28</td>
<td>64</td>
</tr>
<tr>
<td>Misc.</td>
<td>193</td>
<td>156</td>
<td>166</td>
<td>177</td>
<td>167</td>
<td>169</td>
<td>127</td>
</tr>
</tbody>
</table>

Causes of Death -- Marion County (1929 - 1935)
Puerperal Death Rate, Marion County, Oregon
1925 - 1935
per 1,000 live births

Death Rate for Salem and Marion County
1929 - 1935
per 100,000 population
Typhoid Mortality 1920-34
Marion County and State of Oregon
Rate per 100,000 pop.
Chapter IX

Infant, Preschool, and School Hygiene

The infant health problem is under the division of Public Health and Child Hygiene. Infants are cared for through the Marion County Health Department and their nursing staff. Dr. Backstrand, Pediatrician, acts on a part-time, part-pay basis as the physician. The department is supported through the general fund of the County Health Department.

The activities of this department include field visits with respect to actual care of infants and the reporting of serious cases, attendance at nurses' conferences for public education as to infant hygiene and maintenance of clinics for the care of infants. These activities are all conducted through the Marion County Health Department with the assistance of Dr. Backstrand as pediatrician.

An idea of the work of the department is gained by the list of cases handled, as seen below:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Visits</td>
<td>251</td>
</tr>
<tr>
<td>New Infants under 1 mo.</td>
<td>61</td>
</tr>
<tr>
<td>New Infants over 1 mo.</td>
<td>119</td>
</tr>
<tr>
<td>Bedside care for infants</td>
<td>6</td>
</tr>
<tr>
<td>Attendance at nurses' conf.</td>
<td>30</td>
</tr>
<tr>
<td>Clinic visits (old and new)</td>
<td>308</td>
</tr>
<tr>
<td>New clinic cases</td>
<td>259</td>
</tr>
</tbody>
</table>
The preschool health service is under the division of the Public Health and Child Hygiene. It is handled in a similar manner to Infant Hygiene in that this division is run through the Marion County Health Department.

The program for the care of this group of persons consists of the maintenance of clinics where children of this age may be brought for diagnosis and care, attendance of mothers at conferences for instruction, and field visits of the nursing staff. Particular stress is made upon physical examination of all preschool children at the age of five years so that, previous to entrance to school all defects and conditions that might cause delay in entrance, absences, and retarded mental progress may be checked on and relieved where possible.

Field visits 589
New Preschool children under supervision 362
Attendance at conferences 126
Clinic visits 545
New Cases 475

School Health Service is arranged through the Marion County Health Department under the division of Public Health Nursing and Child Hygiene. There are no public school nurses for the city of Salem, other than those provided by the Marion County Health Department. There are provided regular school nurses to assist with the part pay physicians in the examination of school children. Teachers are instructed in health teaching. They provide
a merit system for the encouragement of the children in health activities.

The activities of this division include medical examination, dental examinations, instruction and education by the teachers through the Parent Teachers' Association, and a school health program in which the child may win awards for attendance, cleanliness, and general health.

| Medical examinations          | 4234 |
| Medical examinations with parents | 1039 |
| Medical examinations of the first grade | 580 |
| Medical examinations of the first grade with parents | 344 |
| Dental examinations          | 3875 |
| Dental defects (first degree caries) | 1668 |
| Dental visits to the clinic   | 384  |
| New cases treated at corrective clinics | 193 |

Through examinations the following list of defects were listed:

- Teeth 1728
- Vision 99
- Hearing 165
- Nose and throat 815
- Heart 78
- Thyroid 150

Corrections:

- Teeth 1435
- Vision 364
- Hearing 421
- Nose and throat 556
MARION COUNTY DEPARTMENT OF HEALTH
School Examinations

To Parents:
Arrangements for school health examinations are now being made. Health examinations are of first importance in preserving the health of the school child. If you wish your child examined, please sign below and return to the teacher.
The clinic will be held at __________________ on __________________ M.

IT IS DESIRED THAT AS MANY PARENTS AS POSSIBLE BE PRESENT DURING THE EXAMINATIONS.

Child's Name ___________________ School _______________ Grade ________
Parent's Signature ___________________________ Address __________________

Please check the illnesses child has had:

Scarlet Fever _______ Rheumatism _______ Measles _______
Diphtheria _______ Typhoid Fever _______ Whooping Cough _______
Tonsillitis _______ Smallpox _______ Mumps _______
Chickenpox _______

Vaccinated against smallpox? _______ Immunized against diphtheria? _______

MARION COUNTY DEPARTMENT OF HEALTH
DICK TESTS

To Parents:
Due to an increase in scarlet fever, Dick Tests are now being arranged for all children whose parents desire it. This is a simple harmless skin test which tells whether the child is susceptible to scarlet fever.

If you wish your child tested, please sign below and return slip to the teacher.

Parent's Signature ___________________________ Address __________________
Child's Name ___________________ School _______________ Grade ________
Date of Test ___________________________ Result _______________
<table>
<thead>
<tr>
<th>Date</th>
<th>Occupation</th>
<th>Name</th>
<th>Address</th>
<th>Parent or Guardian</th>
<th>Disease History (Dress)</th>
<th>Complains (Dress)</th>
<th>Age</th>
<th>Race</th>
<th>Sex</th>
<th>Physician</th>
<th>Physician's Examinations</th>
</tr>
</thead>
</table>
MARION COUNTY DEPARTMENT OF HEALTH
School Examinations

To Parents:
Arrangements for school health examinations are now being made. Health examinations are of first importance in preserving the health of the school child. If you wish your child examined, please sign below and return to the teacher. The clinic will be held at ______ on ______ M.

IT IS DESIRED THAT AS MANY PARENTS AS POSSIBLE BE PRESENT DURING THE EXAMINATIONS.

Child's Name ___________________________ School ___________________________ Grade ________

Parent's Signature ___________________________ Address ___________________________

Please check the illnesses child has had:

Scarlet Fever ________ Rheumatism ________ Measles ________
Diphtheria ________ Typhoid Fever ________ Whooping Cough ________
Tonsillitis ________ Smallpox ________ Measles ________

Chickenpox ________

Vaccinated against smallpox? ________ Immunized against diphtheria? ________

MARION COUNTY DEPARTMENT OF HEALTH
Salem, Oregon

HEALTH EXAMINATION CARD

This card when presented at any infant or preschool clinic of the Department of Health will entitle_______________________________

age________________________to one health examination per period as indicated below.

Presented by________________________ Date________________________

Nurse

<table>
<thead>
<tr>
<th>PERIODS</th>
<th>4 MOS.</th>
<th>4 MOS.</th>
<th>6 MOS.</th>
<th>6 MOS.</th>
<th>1 YEAR</th>
<th>1 YEAR</th>
<th>1 YEAR</th>
<th>1 YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1ST YEAR</td>
<td>2ND YEAR</td>
<td>3RD YR.</td>
<td>4TH YR.</td>
<td>5TH YR.</td>
<td>6TH YR.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Clinic clerk to check examinations as given.

Appointments are necessary. Please bring this card with you to the clinic.

MCHD 5-1-31 5M

(over)
DENTAL EXAMINATIONS

Date

To Parents of _______________________________

The child is to take this slip to the family dentist who will make an examination and record the findings below. Then return the slip to the teacher. ***

Date

To Parent and Teacher:

DENTIST'S FINDINGS

Deciduous teeth decayed ______

Permanent teeth decayed ______

Malocclusion ______

No defects ______

Other ______

Dentist __________

To the Teacher: CORRECTIONS

The dental defects indicated above have been corrected this date:

Date _________ Dentist __________

Remarks: ________________________

***To be returned not later than January 17, 19__
MARION COUNTY DEPARTMENT OF HEALTH

Date..................................................

TO PARENT: In the regular school dental examinations today

.................................................... appeared to be
in need of dental attention — free from dental defects.

REMARKS: ..................................................

The family dentist will determine the complete diagnosis and type
of treatment, if any. Take this notice with you to your dentist and
he will sign it after the corrections have been made; then return it
to the teacher.

Dental corrections completed. Date..................................

DENTIST...........................................
Chapter X

Maternity Care

Maternity Care is arranged through the Division of Public Health Nursing and Child by Hygiene and active work is undertaken through the Marion County Health Department and the private physicians on a part-pay basis.

The program undertakes prenatal and postnatal visits, and attendance at deliveries, prenatal service and a physician for home delivery, or, if necessary, hospitalization of the patient. The extent of services has been reduced since the time of the field demonstration, in that more cases are left to the direct supervision of the physician as regards their postnatal and prenatal course. A few maternity homes are in active service, but these are attended by physicians so that there is practically no midwife problem in the community.

The following list gives a conception of the relative activity taken by the Marion County Health Department in maternity care. Figures published June, 1935.

Field visits with prenatal service 172
New prenatal cases 79
Attendance at nurses' prenatal conference 3
Field visits with delivery service 1
New delivery cases 1
Postnatal field visits 76
New postnatal cases 46
Chapter XI

Milk Inspection

Inspection and control of the milk supply of Salem is administered through the Division of Hygiene and a full time inspector payed by the County Health Department. His duties are concerned with inspection of dairies as to cleanliness, pasteurization of the milk, examination of pasteurization heat records, grading dairies, posting of all tests, examination of milkhandlers with assistance of physicians and laboratory, reporting to the State Agricultural bureau untested cattle and taking specimens of milk for testing. Tuberculin testing is handled through the State Bureau of Agriculture in connection with veterinarians, as are also the communicable diseases of cattle.

Salem milk regulation is under the standard milk ordinance.

Activities of the milk inspector: Dairies are visited each month and inspected as to cleanliness and a form is filled out on which are listed the various conditions that shall not exist if the dairy is to maintain its rating. This includes conditions of the barn as to cleanliness of the floors, lighting, screening, disposal of wastes, milk cans,
MARION COUNTY DEPARTMENT OF HEALTH
SALEM, OREGON
Milk and Food Handler's Certificate of Physical Examination

THIS IS TO CERTIFY that.................................................................
was examined on........................................and on that date was found to be free from
communicable diseases in stages which might be dangerous to the public health.

POST IN MILK HOUSE

Signed

Health Officer

This card must always be presented when seeking employment as a milk or food
handler and on request to health officer or his authorized representatives.
separators, milk room, washing facilities, pasteurization machine and examinations of temperature charts. Specimens of milk are taken both at the dairy and at the creameries for routine counts according to the standard milk ordinance. Posting of all certificates as to whether and how recently the cattle have been tested for tuberculosis, posting of forms as to previous examinations of conditions to see if these have been removed by the dairymen, etc. The city Milk Inspector has the right to degrade the dairy if his commands and suggestions are not complied with and this results in the dairymen receiving a lower price for his milk.

Routine examination of milkhandlers is provided for by law. This includes a history and physical examination and laboratory methods as suggested by the examination. This is done by a physician paid for by the County Health Department. Examinations are made yearly unless some specialty occasion arises that would indicate examination of milkhandlers as a source of infection.

All dairies are licensed and there is a closed supply of milk so that grading and maintenance of supply is possible. No new dairymen is allowed to start selling milk unless the quota for the district has been raised or he has purchased the dairy which has already a certain quota of milk to produce. This condition helps to control the milk supply
and all illegal delivery of milk can be stopped by the milk inspector for not complying with necessary milk examinations.

Disposal through the stores is governed by the pure food laws and regulations fix of food handlers, as provided by federal, state, and city regulations, both as to quality of product and persons handling food.

| Field visits to producers and shippers | 479 |
| New producers and shippers visited    | 106 |
| Field visits to producers shippers    | 261 |
| New producers shippers visited        | 40  |
| New pasteurizations plants visited    | 140 |
| New licenses granted                  | 72  |
| Milk producers degraded               | 27  |
| Milk distributors degraded            | 0   |
| Illegal milk stopped                  | 0   |
Chapter XII

Water Supply

The water supply of the city of Salem is derived mainly from the Willamette river. This source as is well known is polluted by the towns and cities upstream, mainly Albany, Corvallis, and Eugene. It is, however, adequately protected by filtration, chlorination, and regular bacteriological examination.

The intake is located on a small island a third of a mile upstream from the city. Here the water is allowed to slowly filter through several deep sand beds from which it is finally collected and pumped across the river under considerable pressure through an understream pipe line. It is necessary to keep the water in this pipe line under considerable pressure to prevent contamination by river water through small leaks although the water will flow across to the Salem side under only moderate pressure. For this purpose a constant pressure gauge is used which would turn off the supply should the pressure become too low.

On reaching the central station located in the heart of Salem the water is chlorinated by a method which keeps the concentration relatively constant. It passes then through a series of mechanical pressure filters which remove the larger sediment particles. These are cleaned each hour and then replaced. The water is then distributed through a main pipe line which runs north and south through the city. These and the feeder lines were built over twenty years ago and are of fairly small calibre.
In peak load seasons they are not quite adequate to meet the demand although entirely adequate at other times.

Connected with the southern end of the main pipe line are two deep seventy foot wells which are used only for emergency purposes when the pressure is low in the southern part of the city. Separate chlorination plants are used for this supply. Regular bacteriologic examinations are also made.

Also connected with the southern part of the main pipe line but serving the entire city is the city's only reservoir which is of relatively small capacity. It is used only when the regular supply is low. The water in this supply lies stagnant for the greater part of the year, an objectionable feature as it allows for the growth of algae and the collection of other materials. It is surrounded by a high picket fence and is uncovered.

Periodic inspection of the water plant system is carried out by engineers and bacteriologists. Six times a day specimens are collected from various points in the system. From the intake off the island, the central pumping station, the main pipe line and the two wells these specimens are collected and subjected to the presumptive test for B. coli and total counts. Pollution is indicated when the total count suddenly rises or the presumptive test becomes positive.

Private water supplies are inspected by the sanitary officer and if these are found to drain polluted areas, to have uncovered tops or to show contamination by bacteriologic tests, they are condemned. There are few of these left in the city.
## MARION COUNTY DEPARTMENT OF HEALTH

**LABORATORY REPORT (MUST ACCOMPANY EACH SAMPLE)**

<table>
<thead>
<tr>
<th>NO. OF SPECIMEN</th>
<th>TO BE EXAMINED FOR</th>
<th>FINDINGS</th>
<th>LAB. NO. AND REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Throat Swab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sputum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spinal Fluid</td>
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<tr>
<td>Blood</td>
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<td>Stool</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Smear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

MCHD 6-10-32-5M
Objections to this water supply system are the obviously polluted source and the poor taste of the water. While the final supply of the water is definitely safe as shown by repeated tests it is claimed that the taste and the possibilities of pollution suffer from the source. For this reason the city of Salem has recently purchased the system and begun construction of a new supply system at a cost of over a million dollars.

The new source is taken from the North Fork of the Santiam river. This source is definitely unpolluted for practical purposes. Here an island has been converted into a huge natural sand filter from which the water will be collected, chlorinated and pumped to a large concrete pipe line which will carry the water by gravity to Salem at the rate of 15 million gallons a day. The source is located just above Stayton Oregon, about 17 miles from Salem. A new concrete covered reservoir has been constructed which has a storage capacity of ten million gallons and in which the water will be in constant circulation.

The old main pipe line is to be rebuilt.

This new water system though desirable may be more expensive than it is worth considering the efficacy of the old supply from bacteriologic standards as compared to the great expense of the new system to the taxpayers.
Chapter XIII

Sewage Disposal

The sewage disposal system of the city of Salem is constructed on a basis of five main sewer ones which average four feet in diameter and run from east to west into the Willamette river. These and the feeder lines are well constructed and important connections are examined by the sanitary officer. Nearly 100% of the city's buildings are connected with the system. Notice is served on those in whom sewer connections are lacking as in the above form. Inspection of all new connection with the sewer system and issuance of permits when such connections are deemed safe is required of any person desiring a sewer outlet. Special emphasis is placed on the prevention of cross-connections.
Older sewer connections are inspected by the sanitary officer only on complaint from anyone desiring to do so.

Disposal of sewage is done entirely into the Willamette River at the western end of the main pipe lines. The outlets are adjacent to the waterfront near which are many residences. At low water several of these outlets are seen to be partially above water and the odor created in the immediate vicinity is very disagreeable. The photographs shown had to be "taken on the run". An aerial photographic map recently taken and exhibited in one of the downtown offices shows clearly the five broad sweeps made into the river by the foam, mud and muck from the sewer outlets.

The sewage disposal system is connected with the gutter system draining the streets. Both are adequately constructed, however, as backup of sewage does not occur during rainy or flood seasons.

This system is quite safe as far as the citizens in the city of Salem are concerned. River bathing resorts downstream formally well attended have been for the most part discontinued. Objections to this system is mainly towards the disposal methods. Serious attempts have been made to remedy this but have thus far met with failure. Bonds have been voted by the city council calling for the construction of a modern sewage disposal and fertilizer plant at considerable expense but were never put on the market. The two main reasons for this are the obvious pollution of the water by upstream towns and their failure to similarly attempt to render the water free from pollution, combined with the expense
of the project. That this will eventually be completed at some future date is more than probable.

For the time being attempts should be made to make the sewer outlets under the level of the river surface during all seasons. Later when financial conditions permit, the city should disconnect storm sewers from sanitary sewers and collect material from the sanitary sewers in a sewage disposal plant. Here the sewage might be subjected to sedimentation in a mechanical clarifier and then sent to a digestion plant to be finally filtered and the sludge activated by air pressure or coagulated by heat and chemicals.
Chapter XIV

Sanitation

The control of sanitary conditions in the city of Salem is through the office of the city sanitary inspector a full time officer paid by the city. His duties are to supervise public and semi-private water supplies and sewage disposal systems, to inspect periodically tourist camps, hotels, restaurants and canneries, to abate nuisances and to educate in the methods of improving home sanitation, housing, lighting and ventilation. Water, sewage, garbage and refuse control has already been discussed.

Periodic inspection of the sanitary facilities of restaurants hotels, tourists camps and canneries is carried out by the sanitary officer and recommendations or demands for improvement given when necessary. Permits for operation of eating houses are issued after inspection and must be posted in their kitchens. Unsanitary conditions are not tolerated by the health officer who is empowered to close down such establishments. Examination of food handlers in restaurants and hotels discontinued during depression years because of lack of funds is being resumed again. Gross and bacteriologic examination of food dispensing ware such as tableware, dishes, soft drink and beer dispensing apparatus and methods of cleaning is slowly being resumed after abandonment. In the bacteriologic examination a few drops of water are poured over the ware, collected and cultured for bacteria on agar plates.

In abating nuisances the sanitary officer is aided by city ordinances dealing with the various nuisances and by ordinances requiring definite building codes in which the sanitary side is
stressed. Owners of empty lots are required to keep these free from collections of rubbish. Dumps are not allowed within the city limits. These and other minor nuisances such as rats and vermin flies and mosquitoes and their breeding places, unnecessary smoke, dust or noise are dealt with on complaint of any individual or at the health officer's own initiative. The latter then investigates the source of these and gives notice that they must be removed within a certain length of time although city ordinances would exact an immediate fine. Subsequently he returns to see if his instruction have been carried out and to use more forceful measures if necessary. He must be diplomatic in these visits to avoid entanglement in neighborhood disagreements. Occasionally it is necessary for him to initiate campaigns against such potential health menaces as rats and mosquitoes. In these the health officer takes a more active part. Although there are numerous mosquito breeding places near Salem there are few mosquitoes in the city unless breeding places are established there. This occasionally occurs in such places as garden pools or undrained sections. These are jobs for the sanitary officer to abate.

The keeping of domestic animals such as cows and chickens within the city limits is prohibited by law and enforced through the health office. The officer, however, in many cases where in outlying districts poorer people need these for their support will ignore the animals unless pressure is brought on him for their removal, or he sees that they constitute a definite health menace.

One of the greatest of recent nuisances, that of a heavy sulphurous odor combined with clouds of fine black cinders which originated from a local paper mill was for the most part alleviated
by the construction of a huge cinder and smoke filtration plant on that companies chimneys.

The following statistics indicate various activities of general sanitation:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field visits</td>
<td>1516</td>
</tr>
<tr>
<td>Water supplies tested</td>
<td>207</td>
</tr>
<tr>
<td>Excreta disposal</td>
<td>347</td>
</tr>
<tr>
<td>General sanitation</td>
<td>1033</td>
</tr>
<tr>
<td>To schools</td>
<td>121</td>
</tr>
<tr>
<td>To tourist camps</td>
<td>55</td>
</tr>
<tr>
<td>To industrial camps or plants</td>
<td>1</td>
</tr>
<tr>
<td>To other places</td>
<td>1339</td>
</tr>
<tr>
<td>Water supplies made safe</td>
<td>6</td>
</tr>
<tr>
<td>Excreta disposal methods corrected</td>
<td>56</td>
</tr>
<tr>
<td>Nuisances abated</td>
<td>268</td>
</tr>
</tbody>
</table>

With the aid of Laboratory diagnosis

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number throat swabs (diphtheria)</td>
<td>315</td>
</tr>
<tr>
<td>(Scarlet Fever and Strept)</td>
<td>107</td>
</tr>
<tr>
<td>Widals (Typhoid and Paratyphoid) (Undulant &quot;ever&quot;)</td>
<td>8</td>
</tr>
<tr>
<td>Kalm test (Lues)</td>
<td>439</td>
</tr>
<tr>
<td>Sputum (Tbc)</td>
<td>48</td>
</tr>
<tr>
<td>Smears (GC)</td>
<td>33</td>
</tr>
<tr>
<td>Stools (Parasites)</td>
<td>1</td>
</tr>
<tr>
<td>Urine (Typhoid and Paratyphoid)</td>
<td>13</td>
</tr>
<tr>
<td>Others</td>
<td>7</td>
</tr>
</tbody>
</table>
Chapter XV

Garbage

Collection of garbage is done by the private concerns licensed by the city and paid for by the individual. Laws providing for the removal of any nuisances in respect to accumulations of refuse are administered by the city and this removal is at the expense of the owner of the property. Penalties for non compliance are provided.

The city owns and operates a large incinerator in the South East side of Salem and here provides for the disposal of all combustable waste and also in the 5 acre tract of land numerous areas and excavations for the disposal of non combustable material. Any private citizen may dispose of garbage here without toll.
Chapter XVI

Education

Much of the education of the general public along health matters is done through campaigning with the school children. As the percentage of illiterate and foreign born in Marion county is very slight as compared with that in larger cities, much help may be done through the medium of the newspapers and public speakers. The public health nurses and the county health department distribute instructive pamphlets.

An essential part of this educational program is the activity of the Marion County Health Department during the state fair which is held in the fall of each year. Both the State Tuberculosis Sanitarium and the Marion County Health Departments maintain booths at the time and do much general health education among the lay public. Several example pamphlets follow on successive pages.

The following is a report of activities of the Marion County Public Health Assoc in matters of popular health instruction:
<table>
<thead>
<tr>
<th>Subject</th>
<th>Attend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicable Disease</td>
<td>342</td>
</tr>
<tr>
<td>Veneraal Disease</td>
<td>30</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>5</td>
</tr>
<tr>
<td>Maternal Hygiene</td>
<td>18</td>
</tr>
<tr>
<td>Infant and preschool hygiene</td>
<td>125</td>
</tr>
<tr>
<td>General Sanitation</td>
<td>127</td>
</tr>
<tr>
<td>Milk and Food Supplies</td>
<td>130</td>
</tr>
<tr>
<td>Other subjects</td>
<td>153</td>
</tr>
</tbody>
</table>
A Few Facts About Gonorrhea
Issued by the Oregon State Board of Health

HEALTH CAREFULLY AND OFTEN

1. Gonorrhea is one of the most common of the highly contagious diseases and is also known as many other names, the most common being "gray," "a dose," and the most common being "gonorrhea." The "gonococcus" is the historical term for the disease.

2. Gonorrhea is caused by a minute germ called the "gonococcus," so small it can be seen only under the microscope.

3. Gonorrhea is usually spread by sexual intercourse, but may be spread by accidental contact with the gonococcal discharge or pus. The most serious forms of this accidental infection are infection of the eyes, when it often causes blindness, and infection of the "private" of little girls and girl babies, often from contaminated bedding.

4. Gonorrhea is a serious disease, and not a trivial annoyance "no worse than a bad cold" as is often ignorantly said.

5. Gonorrhea is always a serious disease because:
   (a) It is occasionally directly fatal.
   (b) It is the longest lasting list of complications which may come on long after the original "dose" seems to be safely cured.
   (c) In millions of cases it is transmitted by bodies which have not been thoroughly cured and thereby produces long drawn out female disease curable only by serious operations.
   (d) It is the greatest cause of sterility or inability to have children, due either to infection of the wife or gonococcal inflammation of the testicle in the husband.
   (e) It is the greatest of all causes of blindness in babies and is the cause of more than 10 per cent of all blindness.

6. Gonorrhea has many distinctly recognized complications. The most frequent and important are:

   In the Male
   - Inflammation of the bladder.
   - Inflammation of the testicle.
   - Inflammation of the epididymis.
   - Inflammation of the kidneys.
   - Inflammation of the urethra.
   - Inflammation of the cervix.

   In the Female
   - Inflammation of the womb.
   - Inflammation of the ovaries.
   - Inflammation of the tubes.
   - Inflammation of the vagina.
   - Inflammation of the bladder.
   - Inflammation of the intestines.
   - Inflammation of the kidneys.
   - Inflammation of the urethra.
   - Inflammation of the ears.

   Sterility.

7. Gonorrhea is one of the most deceptive of all diseases. It is easy to think it is cured when really only superficial change has slipped, while the gonococcus is still present, able to do extensive damage to the patient and to infect others.

8. Gonorrhea affects practically all prostitutes sooner or later, both the public and the prostitute or servant prostitutes.

9. Gonorrhea is practically all instances a curable disease if treatment is begun early, completely given, faithfully followed out by patient, and KLEFT UP sufficiently long. The time necessary will almost never be less than one month and may take many months.

10. Gonorrhea may recur more than once; one attack does not produce any protection against later infection.

11. Gonorrhea is a preventable disease, but the only sure means of prevention is in avoiding exposure. DON'T TAKE A CHANCE.

PERSONAL ADVICE TO PATIENT

1. Never forget your disease is infectious, or "catching" by other means than by sexual intercourse.

2. It may be transmitted to the eyes and private organs through contact with the discharge from the urethra or cervix.

3. Never permit the slightest opportunity for other persons to come in contact with those discharges, or with anything contaminated by them.

4. To avoid this, follow these rules:
   (a) Always wash the hands thoroughly with soap and hot water after every urination or other handling of the diseased organs. Remember, by one such act of carelessness you may carry the infection on your fingers to your own eyes and expose yourself to the risk of becoming blind.
   (b) After washing the hands, do not merely rinse the hands or lavatory; wash it thoroughly with soap and hot water, and preferably follow by an antiseptic solution of strength, as advised by your physician.
   (c) The same care should be used in washing out clothes. The use of public baths is prohibited. Never use any bath on immediately preceding another person.
   (d) Always have your individual towel. The use of the common towel is a prolific cause of gonococcal infection of the eyes. Don't expose others to the risk of blindness.

5. To prevent the spreading and unkindness against selling by use of dirty dressings.

6. Soldered clothing should be handled separately; or, if impossible, soldered petition should be immersed in boiling water or an approved antiseptic solution before being added to other laundry.

7. All dressings may be burned or otherwise destroyed. Never leave them where they are accessible to flies.


9. Sleep alone. Above all, have no sexual intercourse until you know you are well. You will not wish to be charged with causing the loss of health, or possibly the death, of any person. Besides, your physician will tell you, it retards your own recovery.

10. Follow your physician's advice, and do not come treatment until by every known means he has satisfied himself of your recovery and assures you there is no longer danger of transmitting the disease.

11. Do not be led away by pretenses of hasty cures by falsely advertised drug-store remedies. Cheap cures make miserable lives. You gain nothing but bitter experience in pouncing on yourself, and you risk the injury of those nearest and dearest to you. Play fair with yourself and with others.

5. Consult your doctor at least once a week for the first three months.

IMPORTANT. READ CAREFULLY. FOLLOW INSTRUCTIONS IF YOU WISH YOUR NAME KEPT SECRET

You are given this circular of instructions with this serial number by your doctor because the law requires him to do so and to report your case to the State Board of Health by this number without revealing your name. If you change doctors for any reason and wish to keep your name concealed you must see to it that the doctor you last consulted notifies the doctor previously having charge of your case within TEN DAYS.

If you fall to come for treatment at the time ordered by your doctor within the period in which your disease is before and he does not receive notice within TEN DAYS from another doctor stating that you have placed yourself under his professional care, the doctor giving you this circular is obliged by law to report, your name and address to the health authorities as a person suffering from a disease dangerous to the public health and reasonably not under proper medical advice and care sufficient to protect others from infection. You will then be liable to quarantine or such other procedure as the Board of Health may determine. If you want your name kept secret follow these instructions carefully. Your doctor will tell you when your case is no longer infectious.
Facts You Should Know About Syphilis

Issued by the Oregon State Board of Health

1. Syphilis, also known as “pox,” is a serious contagious disease, acting slowly but affecting all parts of the body; is never cured except by treatment.

2. Syphilis is caused by a small germ which can only be seen by a powerful microscope.

3. Syphilis always begins with a small sore which develops at the place where the germ enters the body. This sore develops slowly in from one to three weeks. The small sore, pimple or ulcer is painless, hard like parchement, and is called a chancre. This period of the disease is known as the FIRST STAGE.

4. Syphilis gradually develops after the chancre has apparently been cured. The next symptoms are apt to be eruption of the skin, sores in the mouth and throat, or under the tongue. Swelling of the glands of the body, pain, deep pains in the bones and muscles. This stage is known as the SECOND STAGE. As these symptoms disappear, one is apt to conclude that the disease is cured, but it is not. The germs may remain quiet in the body possibly for several years, and then suddenly produce serious effects. They may destroy the brain, nerves, blood vessels and bones; quite frequently causing forms of paralysis or softening of the brain. This condition is known as the THIRD STAGE and usually ends fatally in a short time.

5. Syphilis may be transmitted to the unborn child either by father or mother. It is frequently the cause of miscarriage, childbirth, or stillbirth. Such children often live but a short time and are serious sources of contagion.

6. Syphilis is very contagious in the first and second stages.

7. Syphilis is easily cured in the first stage and may be cured with proper treatment in the second stage.

8. Syphilis in any stage requires thorough and scientific treatment by special remedies. Certain laboratory tests of blood, as the Wassermann test, are of great help in determining when the disease is cured.

9. Syphilis is frequently transmitted accidentally during the first and second stages by kissing, use of common towels, drinking glasses, etc.

10. Syphilis affects most public and clandestine prostitutes. It should be prevented by avoiding all possibility of infection.

11. Syphilis can be cured, but it requires a long time. A person with this disease must be sure he is getting proper treatment and continue same for a long time, until blood tests demonstrate he has been cured.

ADVICE TO THE PATIENT

1. Remember that your disease may be communicated to others by careless contact.

2. It may be transmitted by the secretions of the body especially by the blood serum oozing from the sores, particularly of the mucus surface, such as sores on the lips or in the mouth and throat.

3. To avoid this, follow carefully the following instructions: Until all these sores have been healed and your physician has given permission, you should never use drinking cups, eating utensils, towels or toilet articles that may be used by others. All dressings used for these sores or ulcers should be burned. They should never be left accessible to flies as they might carry your disease to others. Never kiss others or permit them to kiss you. Follow the advice of your physician as to habits, diet and occupation. DO NOT CEASE TREATMENT UNTIL ALL DANGER OF COMMUNICATING YOUR DISEASE TO OTHERS HAS PASSED. DO NOT ALLOW YOURSELF TO BE MISGUIDED BY ADVERTISED QUICK REMEDIES, cheap cures and promises of a speedy cure. You gain nothing and you surely will deceive yourself and run the risk of inflicting a serious injury to those with whom you come in contact. If you will observe these rules you may expect a cure for yourself and a protection for others, and your name will be kept secret.

IMPORTANT. READ CAREFULLY. FOLLOW INSTRUCTIONS IF YOU WISH YOUR NAME KEPT SECRET

You are given this circular of instructions by your doctor because the law requires him to do so and to report your case to the State Board of Health by this number without revealing your name.

If you change doctors for any reason and wish to keep your name concealed you must see to it that the doctor you last consulted notifies the doctor previously having charge of your case within TEN DAYS.

If you fail to come for treatment at the time ordered by your doctor within the period in which your disease is infective he does not receive notice within TEN DAYS from another doctor stating that you have placed yourself under his professional care and will be seen by him and that the doctor giving you this circular is obliged by law to report, your name and address to the health authorities as a person suffering from a disease dangerous to public health and presumably not under proper medical advice and care sufficient to protect others from infection. You will then be liable to quarantine or such other procedure as the Board of Health may determine. If you want your name kept secret follow these instructions carefully. Your doctor will tell you when your case is no longer infectious.
Your Friend
THE
HEALTH OFFICER
MARION COUNTY HEALTH UNIT
434 North High Street, Salem, Oregon

Care of Communicable Diseases in the Home
Diphtheria, Smallpox, Scarlet Fever, Typhoid Fever

1. THE ROOM—In the home care of a patient who has a communicable disease there should be selected if possible a pleasant single room which is near a bathroom and away from rooms and entrances used by other members of the family. Unnecessary hangings, rugs and furniture should be removed. The room should have screened windows during fly seasons and be well lighted and ventilated. An excessively hot room is to be avoided. When sweeping, care should be taken not to raise dust. Frequent cleaning of floors, furniture and bedsteads is desirable.

2. THE ATTENDANT—Only one individual should be detailed to care for the patient, and no other person except the physician or nurse should enter the room. The attendant should wear a washable outer gown or apron which should be removed and left in the room upon leaving. The hands should be thoroughly cleansed in lysol or other similar solution after handling the patient. Health department nurses will give attendants instructions in these matters.

3. DISHES—The patient should have separate dishes, glasses, towels, etc., and nothing should leave the room unless it has been properly sterilized or is to be immediately sterilized or destroyed after removal.

4. DESTRUCTION OF DISCHARGES—Gauze, soft rags or paper napkins should be used for all discharges from the nose and throat, to be dropped into a paper bag hung at the bedside. The paper bag with contents should be burned daily. In case of typhoid fever and other intestinal diseases the bladder and intestinal discharges should be disinfected by the addition of lysol or chloride of lime before being disposed of.

5. PREVENTION—The further spread of the disease in the family should be prevented when possible by vaccination or inoculation as advised by the attending physician. If symptoms do develop, however, the new patient should also be immediately isolated as many of the common communicable diseases are most contagious early.

6. CARE OF PATIENT—The danger of many so called minor communicable diseases lies in complications such as kidney trouble, heart trouble, pneumonia and ear inflammation. Patients with fever must always be kept in bed and the instruction of the attending physician otherwise accurately carried out. On the development of any untoward symptoms, the doctor should be called for advice.

7. THE QUARANTINE—When a home is quarantined no member of the household may leave the premises except those given permission to do so by the health officer. Special permission can be given to certain immune individuals, wage earners and others. No articles of any kind must leave the home. Food and milk may be delivered to the home as usual but the milk bottles must not be removed until quarantine is lifted.

8. THE RELEASE—On release from quarantine the patient should be given a thorough bath from head to foot and the mouth and teeth well cleansed. The patient should then dress in another room, using clean clothes. Fumigation is not necessary but thorough cleaning, washing and airing of rooms occupied by the patient are required. Special attention should be given to door knobs, woodwork, bedsteads and furniture. Articles which are no longer of any service should be destroyed or burned, especially old toys, books, etc. Bedding and washable clothing should be boiled or soaked in a lysol solution and then washed. Unwashable useful articles can be disinfected by airing and sunning for twelve hours.
Tuberculosis

Nourishing Food

Cleanliness

Sunlight

Rest

IMPORTANT POINTS IN TUBERCULOSIS PREVENTION

METROPOLITAN LIFE INSURANCE COMPANY
HOME OFFICE, NEW YORK
Pacific Coast Head Office, San Francisco
Canadian Head Office, Ottawa
MR. TAXPAYER GOES SHOPPING
Chapter XVII

Criticism and General Summary

1. At the present time due to the intensive campaigning and educational efforts that have been made in regard to tuberculosis control there is a splendid service. It is recommended that this be continued with further emphasis upon the importance of early recognition and reporting of positive cases with adequate follow-up and examination of contacts.

2. In the control of venereal diseases facilities for lumbar puncture should be established. It is recommended that routine blood serological examinations be run, under the control of the physician in charge at state expense. Morbidity reports of venereal diseases should give data in relation to the stage or chronicity of these infections, the distribution of the case according to age and sex, prevalence of syphilis in pregnant women, and of gonorrheal vulvovaginitis in children. The relationship between marriage and venereal diseases and the time interval between infection and the beginning of treatment should be recorded. It is further recommended that all applicants for marriage certificates have routine Wassermans at state expense.
3. The Communicable disease program is fairly adequate but the plan might be strengthened by
a: increasing the percentage of school children vaccinated against smallpox.
b: Directing medical and public attention to the importance of measles as an acute communicable disease.
c: Considering the use of whole blood and immune serum and possibly placental extract as preventive agents against measles.

4. Under the regime of the Commonwealth Program Marion County Health Association was adequately staffed. However, with the depression certain changes had to be made. Now, that business is on the up trend in order to bring about a balance and extension of program necessary to continue the effective work, there should be additions to the personnel of at least two staff nurses, a nursing supervisor, and a part-time clerk.

5. The school health program might well be increased by special classes for backward students and for the physically handicapped. The child guidance program should be augmented by a competent psychiatrist and a nursing staff for follow-up and contact work.

6. Prenatal care is inadequate at the present time and it is recommended that a free clinic for prenatal and postnatal care on certain days conducted by the Marion County Health department through the cooperation of local physicians on a part-time
basis. At such a clinic expectant mothers could come without pay, or perhaps a nominal charge if they were able to pay something. At the present time this is handled by the physician in charge of the case and expectant mothers neglect to make prenatal contacts because of lack of knowledge of its importance and financial means. With free or part-free clinics providing care and education for expectant mothers the early diagnosis of pathological conditions could be facilitated and situation remedied.

7. Completion of the new water supply system it is expected will overcome all the difficulties of the present system from a public health as well as aesthetic standpoint.

8. It is recommended that the present sanitary program be extended to cover the entire county.

9. In regards to the sewage disposal, attempts should be made to make the sewer outlets below the river surface during all seasons. In addition, attempts should be made at an early date to render the Willamette River free of sewage pollution by cooperation with up-stream cities and towns. Although the city of Salem has voted bonds for a sewage disposal plant, lack of cooperation with up-stream cities has
made the construction of such a plant at the present time futile.

The Marion County Health Program at the present time is well organized and efficiently conducted in comparison with other counties, probably due to the stimulus received through the Commonwealth fund. The outlook for the future is excellent with extension of functions and personnel as is compatible with funds and relationships with physicians.