

FOURTH BIENNIAL REPORT

of the

STATE BOARD OF HEALTH

to the

GOVERNOR OF OREGON

and the

TWENTY-SIXTH LEGISLATIVE ASSEMBLY
REGULAR SESSION

1911



SALEM, OREGON
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1910

REPORT

*To the Honorable the Governor and the Legislative Assembly
of the State of Oregon:*

GENTLEMEN: We respectfully submit herewith the report of the State Board of Health for the biennial period ending September 30, 1910, for your consideration and approval.

WORK OF THE BOARD.

The work of the board has covered the general field of the collection of the vital statistics of the State, the collection of the records of contagious and infectious diseases, the supervision, care and prevention of the same, educational work of a public nature by lectures before public assemblies and the preparation and distribution of bulletins upon matters of health and the prevention of diseases of emergency or great general public interest. In addition we have conducted a bacteriological laboratory where we have made examinations and rendered reports upon specimens of diseased tissues which are daily sent to us from all parts of the State. A recital of the details of this work would be tiresome and aside from the tables appended to this report, we will only refer to them in a general way.

If the claim of all political economists that the health, well being and bodily vigor of its citizens is the greatest asset of a community is true, we feel that we are engaged in what is perhaps the most important and useful work in the State and it is with a sense of satisfaction that we call your attention to the results which have been accomplished with the entirely inadequate means which have been placed at our disposal. The entire sum allowed us with which to carry on the work in a territory of some 94,500 square miles with a population of 672,705 people is but five thousand dollars a year which averages about seven-tenths of one cent to be expended in a period of one year for each inhabitant of the State, an apportionment so utterly inadequate to the purpose as to call for no comment.

This sum of five thousand dollars a year has been made to do duty and meet all of the expenses of the work of this board, and the record of this department for the results accomplished and the economy which has been practised is espe-

cially called to your attention in the full confidence that even a cursory examination of the same will be not only a sufficient certification of the economy which is used by this body in the care and expenditure of public funds, but also to the need and wisdom of allowing it sufficient funds to carry on the work in a manner adequate to its legitimate and urgent needs, in the future.

It is but due to you in this connection to state that out of this sum of \$5,000 a year, we have had to pay the expenses of conducting a bacteriological laboratory including the rental of rooms and the services of a scientific bacteriologist upon whom from necessity on our part, we have had to shamefully impose in order to secure anything like the results which are demanded of us by the State at large.

In addition to this, the services of a health officer and clerk and the rent for rooms in which to maintain an office and to receive, compile and file records has been paid for out of this fund, as have all traveling expenses of the health officer and members of the board who are frequently called to outlying districts of the State to take charge and supervise outbreaks of infectious and epidemic diseases.

In addition to this, the fund has been called upon to pay postage upon the voluminous correspondence which is carried on by us in replying to the numerous inquiries which are daily received in relation to public health as well as upon the bulletins which are regularly issued by this department.

Another heavy expenditure has been the payment of express charges upon specimens which are sent to us C. O. D. for analysis and determination as to the character of infectious diseases which spring up in different portions of the State, and which require immediate attention to be of value to the district from which they are received.

This summary is not submitted in a spirit of criticism, but is offered with a view to enlisting your interest in an important subject and by way of explanation to those engaged in similar lines of work in other states of the serious handicap under which we have labored as Board of Health; the amount of money allowed for such work being less than that perhaps in any other state in the union.

PUBLIC EDUCATION.

Realizing that no advance of a great or permanent character can be made until the intelligent interest of the general public has been enlisted in and made cognizant of the value of the work of this department, we have endeavored at all

times by public discussion and lectures upon matters of public health and hygiene to secure the co-operation of the people at large in a cause in which they are so vitally interested. With this end in view, the health officer or some member of the board has delivered addresses or read papers before teachers' institutes and mothers' clubs at Arleta, Forest Grove, Sellwood, Portland, before the State Grange, public meetings in Portland and Pendleton, and other places. The citizens of other districts have been met with and consulted and advised respecting local conditions which were inimical to the health of such localities.

SANITARY WORK.

The sanitary conditions of the seaside resorts in Oregon were investigated and in all instances the board's recommendations were followed.

PREVENTION OF TYPHOID FEVER.

The board has endeavored during the past year especially to reduce the numbers and consequent mortality from typhoid fever. With this end in view, analyses of water have been made from many sections of the State and on proof of contamination, the secretary has endeavored to trace its source and prevent further infection. In almost all instances, this has been successful and we have saved to the people of Oregon many thousand dollars in expense of caring for typhoid patients, to say nothing of the accompanying suffering and death. Illustrative of this, just a few specific instances are here quoted. In Willamette during February, 39 cases of typhoid developed in the little town of a population of 300, all using the same water supply. An examination of the water showed the presence of colon bacilli. We had the entire system opened up, flushed, the reservoir scrubbed and posted notices to boil all water until such time as the water company could protect, with concrete caissons, the springs supplying the water. Since that time, the town has had but one case and that man, a logger, working on the log booms in the Willamette River where his infection was probably acquired.

At St. Helens in Columbia County where, on account of an inadequate supply, water was pumped from the Columbia River, 19 cases with three deaths resulted, when it was brought to the attention of the board. The same action as at Willamette was taken. An emergency pipe was laid to the mountain supply on top of the ground to be buried later. The people were warned of the source of infection and no cases have developed since.

The board pointed out to the people of Grants Pass their dangers from drinking contaminated water from the Rogue River and a frightful epidemic was abated.

In Roseburg, the board was able, by its laboratory and inspection by the secretary, to trace 14 cases of typhoid to two wells. The source of contamination in one of them was proven without doubt, and this abated what would probably have been a serious epidemic there.

We have repeatedly called the attention of Hood River to its contaminated water supply.

We have made numerous examinations and investigations of Salem's supply and have reported our findings to the water board, the health officer and the public.

BIRTHS.

There have been reported to this office during the biennial period, seventeen thousand three hundred and six births with name, sex and parentage. These have been made a matter of public record that will in the future be of undoubted value in establishing parentage and property rights.

DEATHS.

Eleven thousand one hundred and six deaths have been reported and classified as to cause, age, sex, civil condition, birthplace, etc. The records of this department have already become of value and we are being called upon frequently to furnish certified copies of death reports for foreign countries, to establish claims for pensions in this country and for proofs of death to establish property rights.

Certified copies of all death reports are sent monthly to the Census Bureau in Washington, D. C.

INFECTIOUS AND CONTAGIOUS DISEASES.

There have been reported 5256 cases of contagious diseases in the past two years. These are divided as follows: Tuberculosis, 464 cases and 1031 deaths. We here wish to call attention to the fact that the State of Oregon and the city of Portland have laws which require that all cases of this disease be reported. Yet such reports are not made. Inasmuch as this State now has a public sanatorium for the treatment of persons suffering from this highly infectious disease, the law should hereafter be rigidly enforced.

There were reported 1608 cases of typhoid fever with 298 deaths. Diphtheria, 1201 cases with 168 deaths. Scarlet fever, 2033 cases with 89 deaths. Measles, 3004 cases with 25 deaths. Smallpox, 685 cases with one death. All other

infectious diseases (including erysipelas, whooping-cough, pellagra (one death), chicken-pox, etc.), 503 cases with 83 deaths.

MARRIAGES.

There have been reported 10,450 marriages.

SMALLPOX.

The health officer has investigated outbreaks of smallpox at Lebanon, Albany, McMinnville, Amity and Dayton.

SCARLET-FEVER.

He has also investigated outbreaks of scarlet-fever at Portland, Corvallis, Wichita, Dayton and Lents.

DAIRIES.

The health officer has kept supervision over dairies selling certified milk, and repeated chemical and bacteriological examinations of such milk have been made.

FOOD.

He has made personal investigations of slaughter houses and the method of handling meats for foods in the greater portion of the Willamette Valley, and he reports that while much is left to be desired conditions have been greatly improved.

BACTERIOLOGICAL LABORATORY.

In this very important department of our work, there have been made 9169 examinations. Of these 644 were made of water for household use and public use to ascertain whether it was contaminated or not.

Two thousand two hundred and eighty seven examinations of cultures were made to ascertain the presence of diphtheria.

Two thousand two hundred and seventy examinations of sputum to ascertain the presence of tubercular bacilli.

Two thousand three hundred and sixty-three examinations of blood were made to decide the presence or absence of typhoid fever and syphilis.

Five examinations of pus were made to ascertain the cause of its presence.

Seventy-one examinations of milk were made to ascertain its degree of purity.

One hundred and seventy-five other examinations were made of miscellaneous cases to determine the presence or absence of glanders, pellagra, bubonic plague, trichina, etc.

The laboratory of the State Board of Health has passed the experimental stage and developed into an important insti-

tution for the welfare and safety of our commonwealth. The good work that has been done since the creation of this Board of Health in the State is patent to all. As the immigration to this State increases its population, greater demands for protection of the public against imported contagious and infectious diseases augments the duties of health officers and laboratory.

The routine work of sputum examination for tubercle bacilli, analysis of water, examination of diphtheric swabs, etc., are important and should be continued but there are other problems confronting us which must be met. This State must solve her own problems and not depend upon other states nor borrow that which she requires for the maintenance of her public health. There is no vaccine, anti-toxine or serum made in this State and we are depending upon other states to produce them for us while they ought to be prepared here at least to a certain extent. To do this work, the laboratory of the State Board of Health would require proper equipment and the necessary funds to maintain it. The present apparatus in the laboratory for the ordinary routine work has been in service so long that most of it has passed its usefulness and should be replaced by new.

An expenditure of \$1,000 to \$1,500 would place the laboratory upon a good working basis. This expenditure is very conservative, considering the returns it would bring to the people of the State.

Most all of the discoveries of diseases of human beings and domestic animals emanate from laboratories and there is a strong demand and an urgent need for research work in some of the obscure diseases that now prevail. This work can only be carried on in a properly equipped laboratory.

BULLETINS.

Bulletins have been issued bi-monthly and distributed throughout the State to all State and county officials and to all physicians in the State, to all health boards throughout the United States and to all federal officials, etc.

These bulletins have taken up and discussed topics pertaining to general health and methods for the prevention of disease. Among the subjects which have been discussed were school hygiene; the unwise use of common drinking cups for school children; tuberculosis and how it is disseminated; vaccination as a protection from smallpox; typhoid fever, how to guard against; antiseptic telephone transmitters and the fallacies which are being disseminated by the vendors thereof; duties of health officers to the public; pure milk; flies as active

disseminators of filth and disease; rabies or hydrophobia, its cause, and measures to be employed in prevention; ophthalmia neonatorum, the cause of blindness in so many cases and the simple and easy means to prevent the occurrence of this condition in the new born child and the duty of the physician to employ such means in all cases of new born infants; bovine tuberculosis, the relation of the same to disease in human beings; slaughterhouses, the necessity for cleanliness and frequent inspection; water supplies, the value of keeping them pure and uncontaminated; infantile paralysis, a disease the cause of which has not yet been ascertained. In relation to this disease, we wish to say that the increasing frequency and the dire results of this distressing malady demands and makes it incumbent that the most painstaking and careful bacteriological search shall be made by this department to discover its cause as a matter of duty not only to the citizens of this State but to that of humanity as well, and it is hoped by us that in making provision for our funds for the next biennial term that this subject shall receive the consideration which it deserves.

POLLUTION OF STREAMS.

A question of grave importance to the health of all of the people of the State, and which it is our duty to call your attention so that you may authorize stringent measures to remedy present conditions and guard against an increasing evil, is the pollution of the fresh water streams of the State.

These streams, from the smallest rivulet up to and including such navigable streams as the Columbia and Willamette rivers, arise from pure and undefiled sources in the mountains, and remain pure and wholesome until such time as they descend to a level where they come into contact with mankind. From this point on until they lose themselves in the sea, they become a conduit into which in increasing quantities in direct proportion to the increasing density of the population, along their banks is cast offal and filth until nearly all of the streams of the State have become mere sewers, the water from which is not only dangerous to drink but too filthy in many places to bathe in. Even the very fish which have no means of escape are largely becoming infected and unfit for food. This condition is rapidly growing worse and has become a peril of no mean import, and is a grave reflection upon the intelligence and degree of civilization of the entire community and should be estopped at once and forever.

In a few years more, the condition will become unbearable and perhaps even deadly. The remedy is simple, easily

applied and profitable as well. All waste material under proper conditions of preparation should go back to the soil from whence it came, where it will act as a fertilizer and become a blessing to man in place of the curse which it is now getting to be. No one who is not familiar with the conditions as they now exist can realize the extent to which the streams are becoming polluted, and we wish to voice our earnest protest against a continuance of present conditions.

MOVING PICTURE SHOWS.

Aside from any criticism of the moral tone or the cheap and tawdry sentimentality of the average moving picture show, which latter existent condition must act to blunt the intelligence and ideals of young persons who so largely compose their audiences, attention is directed to the entire lack of ventilation which is provided in the majority of them. Masses of humanity are packed into enclosures where they breathe the same air over and over again and these resorts have become the disseminating points for all infectious diseases. No moving picture or other show should be allowed to operate until the greatest care has been exercised in providing for ample ventilation of the enclosure in which it is held.

EXPENDITURES.

The expenditures of the board for the biennial period have been as follows:

Maintenance of laboratory, drugs, chemicals, etc.	\$ 1,011.07
Members of board in traveling and other expenses in attending meetings	753.50
Salaries of secretary, clerk, bacteriologist, and clerical hire....	6,975.90
Expenses, including postage, expressage, traveling expenses of health officer	780.30
Printing and binding, stationery, office supplies, etc.	780.30
Total	<u>\$10,301.07</u>

For all these expenditures proper requisitions and vouchers have been issued and are of record.

As you will note there is a deficiency of three hundred and one dollars and seven cents in the fund at the end of the biennial. This is due to increased demand for birth and death certificates, record books and supplies for county health officers, increased postage, and larger expenses of the health officer whose presence is constantly demanded in many sections of the State. Another heavy item of expense is the expressage on matter sent C. O. D. to the laboratory and telegrams sent in the same manner which we cannot safely decline.

Considering the large amount of work which has been accomplished and the increasing demand which is being made upon this board from all parts of the State for bacteriological and other examinations, for literature, for information of all kinds and for the actual presence of the health officer in different districts of the State, much of which has been mentioned, the expenditure will in our opinion be found to be less than that of any other department of the civic functions of the State.

To accomplish the work demanded of us for the ensuing year, an increase of \$10,000 or an annual appropriation of \$15,000 will be needed.

The question of proper selection of water supplies for a great number of growing cities in the State about which we are and should be consulted, entails increased traveling for the health officer and new and better equipment for the laboratory.

The prevalence of infantile paralysis (*anterior poliomyelitis*) demands that we give our best efforts to determining its cause and devising ways and means to stamp it out.

The presence of unusually malignant smallpox entails increased expenses and the fund you have placed at our disposal for that purpose bids fair to be called on during the coming year.

With an appropriation equal to our urgent needs, we believe we will be able to save in funeral expenses, to say nothing of sickness and suffering, the entire amount you may see fit to place at our disposal.

All of which is respectfully submitted,

W. B. MORSE, M. D., *President.*

ANDREW C. SMITH, M. D., *Vice President.*

E. A. PIERCE, M. D.

ALFRED KINNEY, M. D.

C. J. SMITH, M. D.

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E. F. PERNOT, M. S., *Bacteriologist.*

CALVIN S. WHITE, M. D., *Secretary and
State Health Officer.*