

## The 1918 "Spanish Influenza" Pandemic In Oregon

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"From whence did it come and to where did it go?" This question has been pondered by scientists and historians since before the time of Christ. Great plagues have suddenly appeared, spread rapidly and then completely disappeared, leaving death and misery in their wake. Hippocrates reports one such onslaught that destroyed an Athenian army in 412 B.C. and there have been many others, recurring on an average of at least one devastating visitation each century. Many of these are well documented in history, like the plague of Justinian in the sixth century and the Black Death of 1400 A.D. All have suddenly appeared from nowhere and just as mysteriously, completely disappeared. Ancient philosophers attributed these outbreaks to the *influence* of the stars. This may account for the origin of the term *influenza*.

These same characteristics obtained in the so-called "Spanish" influenza pandemic of 1918. There is no authentic background that justifies the use of the appellation, "Spanish," in connection with the 1918 appearance. There were those who believed that this particular outbreak made its first appearance in Spain, and indeed Spain was definitely in the early clutches of epidemic influenza with many deaths in Madrid and other large cities, but the infection was also prevalent elsewhere. In Italy it was referred to as the "Spanish Influence." It is true that it first became pandemic in Europe, but there are also some data concerning an earlier appearance among our troops at Camp Funstan, Kansas. It is possible that some of our first troops may have carried their particular strain of influenza virus to Europe. At the same time carriers converged upon Europe from almost every part of the world that was cooperating in the Allied war effort against Germany; thus was fanned the great holocaust that swept the world.

The first great outbreak of the pandemic in this country occurred in Boston, the principal shipping point for men and material to the European theater of war. From there it

spread west and south, its course being directly traceable to troop movements, by train and by ship. Although it was a serious problem in and around Boston in late August of 1918, the first outbreak on the Pacific Coast did not appear until late in September at Camp Lewis, Washington, following the arrival of a trainload of troops that had come west from the Boston area. Within six weeks from the time it became prevalent in Boston, virtually every part of the United States and Canada was infected.

The rapid spread of the virus was made possible by great congregations of people, resulting from the war effort, troop concentration and movements, parades, rallies and other mass gatherings for bond drives and patriotic purposes. Yet, strangely enough, epidemics broke out in isolated places far removed from their original sources. The death rate among the Eskimos was extremely high, and there were fatal cases among the lonely and isolated shepherders in Oregon. By the time the pandemic vanished it had claimed over 50,000 lives from among the 20,000,000 persons who had become ill from it throughout the world.

Although the papers had carried daily accounts of the ravages of the pandemic in other parts of the country, the first public announcement concerning the people of Oregon appeared October 5, 1918, on the front page of *The Oregonian*.<sup>1</sup> City Health Officer Dr. George Parrish requested all theater owners to eject from their theaters all persons who coughed or sneezed. He suggested that their admission money be refunded, and he threatened legal action if this "order" was disobeyed. "Several persons," he stated, "have told me of possible cases and several doctors have been reported as having treated cases of Spanish influenza, but inquiry proves that none of the cases was the real thing . . . However, we are taking every possible means to prevent spread of the disease in case it should appear." On this same day the City of Philadelphia reported 788 new cases and 171 deaths.

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1. For sources not specifically identified, the author has used State Board of Health and other material from the Medical School Library, his own and others' recollections and experiences, and the files of the daily Portland *Oregonian* for the period concerned.

Dr. Parrish was a very dynamic person and he gave strong leadership in the fight against the epidemic. Dr. R. E. L. Holt had succeeded Dr. David Roberg as state health officer when the latter had taken a leave of absence to enter the army. Dr. Holt was in turn succeeded by Dr. A. C. Seely of Roseburg, when Dr. Holt entered the service. These men worked strenuously, first to stop the infiltration into the state and later in combating its ravages. The absence of many physicians who had entered the armed services during World War I made for a critical shortage of doctors throughout the state.

On October 7 three hundred slides, to be shown to the public, were distributed to the theaters throughout the state. These carried advice on preventive measures to be employed. The *Oregonian* carried the headline, "Cut Out Sneezing—Doctors War Cry." The public was advised to limit streetcar riding to a minimum. Dr. Holt pointed out that in Berlin, Germany, every streetcar conductor had contracted the flu. The local traction company agreed to keep streetcar loading below the crowding limit. By the following day four cases of "Spanish Flu" were discovered in the Benson Polytechnic Army training school, and were immediately put under quarantine. All soldiers and sailors were banned from the theaters, not only in Portland but elsewhere in the state. The papers carried an appeal for all graduate nurses to make themselves known. Three soldiers were reported dead from influenza at Fort Stevens, at the mouth of the Columbia River, and two more died there the following day.

The headline in the *Oregonian* of October 9 read, "Influenza in City is Under Control," but the city health officer canceled a projected trip to a public health convention in Chicago. All public gatherings in Corvallis were forbidden and an isolation hospital was established there. The Indian School at Chemawa was put under quarantine. In Eugene six cases were reported, and thirty-eight students were under observation for symptoms of "cold." There was a complaint in Portland of the slow response from nurses who were offered employment at \$75 per month; nurses' aides were to be paid \$30 to \$50 depending upon their experience. A

bulletin was issued to all railroad employees requesting their cooperation in handling passengers.

Two days later the City Health Department declared that the total number of cases reported numbered sixty, but that there were probably twice that number; the State Health Office placed the total at 200. Mayor George L. Baker ordered all mass activities shut down. Schools were closed (36,000 children and 1,000 teachers), as well as approximately fifty theaters. All lodge meetings, club activities, pool halls, bowling alleys and outdoor meetings and parades were banned. For the first time in the history of Portland no church services were held.

On October 13 the *Oregonian* reported that the faculty, students and men of Benson High School district had completed an army-type hospital on the school campus in forty-two and a half hours. Though such a task would ordinarily require at least two weeks, the Benson unit had been built at top speed by the labor of ninety men working in three shifts of thirty each. It was staffed by Red Cross nurses and put into immediate service for influenza patients.

Even with this addition, all hospital beds that could be made available for influenza patients were full, and the city was making frantic efforts to provide further care. Two circus-type tents were erected on the grounds of the Multnomah County Hospital, then located at Second and Hooker streets in south Portland. Board floors were laid and cots were acquired to take care of the overflow of county patients. Later these tents were replaced by "portable buildings." There was some discussion about taking over the White Shield Home or commandeering one of the schools for conversion into a hospital.<sup>2</sup> There were many transient patients appearing in the city, some of whom had come from rural communities with no facilities for their care, and many of whom had arrived to work in the shipyards and other war industries.

On October 17 it was announced that the Civic Auditorium had been converted into a city hospital. The main

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2. *Oregonian*, October 15, 1918, p. 12, col. 1.

auditorium was floored over and rows of cots with straw stuffed tick mattresses were installed. Some of the small rooms just off the main lobby were utilized as well. Altogether there were beds for one hundred patients, with bed linen supplied by the Red Cross. The city appropriated \$2,500 in funds for supplies. The death rate at the auditorium was proportionately higher than in other hospitals because most of the patients arrived there after having lain ill in flophouses and other hovels for several days prior to discovery. Because the city ran short of funds and Red Cross supplies were getting low, the administration of the auditorium hospital was taken over by the army in the last half of October. Forty men from the Spruce Division were assigned to duty as orderlies and nurses. The curtain was lowered on the stage of the auditorium and the soldiers' quarters were arranged backstage.<sup>3</sup>

Although Portland received the brunt of the onslaught, other cities and towns throughout the state were in similar trouble and were forced to make out as best they could. In a letter to the writer, Roy A. Ward sent his recollections of events in eastern Oregon:

I was County Agricultural Extension Agent at Redmond, Oregon, a small town near Bend. I cannot state how many of our citizens were down in bed but it was a very considerable percentage. I helped take care of quite a group including some of those who worked in my office. My next door neighbor was the local undertaker, and it was my unfortunate duty to help him lift bodies from place to place when the furniture store was so crowded with bodies that there was little room to get around.

I distinctly remember one morning when I went to help him noticing my good friend the druggist, who was in conversation with me only a few days before, and also a girl who assisted Mrs. Ward with the housework both laid out.

The gymnasium in the City of Bend, our nearest largest town, was turned into a hospital with rows of beds where we took, what seemed to me, hundreds of cases from the City of Bend and the surrounding country.

Fortunately Mrs. Ward and I escaped unscathed.

Mr. E. R. Balsiger, who traveled throughout the state, also recalled some experiences for the writer, as follows:

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3. *Oregonian*, October 21, 1918, p. 14, col. 3. Several days before, twenty soldiers had been sent to the auditorium to help the overworked nurses.

I was traveling for the Simmons Company at the time of the influenza epidemic, and I remember that in Independence, Oregon, where at that time retail stores were all located on one street, three store owners who were all in the prime of life died of flu in the period of about one week. A central Oregon merchant told me of a bachelor farmer whose closest neighbor was twenty-five miles away and who had not been in contact with anyone for over thirty days, but who came down with the flu and an ambulance was sent out to bring him to the hospital.

It seemed that some of the victims of this epidemic suffered such excruciating pains in their head that they became delirious. One of my customers told me of a fine young family man who was unable to get into a hospital so they had sent a nurse to his home. The nurse left his room for a moment and in his delirium he pulled a revolver from the bureau drawer and shot himself.

And then there was Charlie, a credit man for one of the large wholesale houses here in Portland. It seems that Charlie had never been weaned, but had just switched from milk to whiskey. Charlie was quite a character. He kept his tonic in the righthand drawer of his desk and his daily consumption was reported to be anywhere from a pint to a quart. When the flu epidemic struck Charlie, he was really scared and he hurried to his doctor. The doctor looked at him and said, "Charlie you are so pickled a flu germ wouldn't have a chance." And he lived to a ripe old age.

The young man referred to above who shot himself, was not the only suicide. One prominent Portland physician also ended his life during the pain and depression of his illness from influenza.

There was very little that could be done in the way of specific treatment. Once a patient was infected he was isolated from non-infected persons, put to bed, a "pneumonia jacket" applied, and camphorated oil chest rubs and various types of throat sprays were used. If he were rugged enough he survived. Pneumonia was the cause of most of the deaths and the mortality rate was preponderately higher in the twenty to forty-year age group, possibly because these were the people most actively employed in mass activities.

In the late fall, Rosenau serum was made available for use and some vaccines were prepared but there is no convincing evidence that they were particularly successful. Some complaint developed that certain physicians were profiteering in the use of vaccines, and Dr. Parrish announced that since the vaccine was furnished free by the Health Bureau, he considered one dollar to be an adequate fee for the injection. If

# HELP FIGHT THE FLU

1. All schools, churches, lodges, public places of meetings, and places of amusement shall be closed.
2. Avoid crowding at cafeterias or similar places and maintain an interval of at least four feet between individuals. No food must be handled by the public but only by the proper attendants.
3. Food exposed for consumption should be protected.
4. Where there is sickness in the family, allow but one member to wait on patient, who shall at all times, while in contact with the patient, wear a mask and resume it before they enter the room. The patient shall also be screened by hanging sheet across the room or whatever way is practical. The room shall be kept thoroughly ventilated at all times.
5. Consult your physician immediately should your bodily symptoms be in any way below par, as experience has shown that many people are quite ill and yet have symptoms which ordinarily would be disregarded.
6. The public should observe absolutely the recommendations with regard to spitting in public places.
7. Avoid needless crowding. Influenza is a crowd disease.
8. Smother your coughs and sneezes, others do not want the germs which you would throw away.
9. Your nose, not your mouth, was made to breathe through—get the habit.
10. Remember the three C's—a clean mouth, clean skin, and clean clothes.
11. Try to keep cool when you walk and walk a great deal for exercise and bodily vigor. Keep warm when you ride and sleep.
12. Open the windows always at home at night; at the office when practicable.
13. Your fate may be in your own hands. Wash your hands before eating.
14. Don't let the waste product of digestion accumulate—drink a glass or two of water on getting up, before meals, and on retiring.
15. Don't use a napkin, towel, spoon, fork, glass or cup which has been used by another person and not washed.
16. When the air is pure, breathe all of it you can. Breathe deeply.

## MAYOR BAKER Says:

"We have not called this conference because of any marked increase in the number of reported cases of Spanish influenza, but because of our belief that more stringent regulations during the next few days will have a direct tendency to shorten the period during which regulations of any sort will be needed. Preventive measures promulgated at the beginning of the epidemic resulted in Portland suffering less from the illness than any other city of like population in the Nation, and the present step is taken with the view that the sacrifices and loss entailed will be more than compensated by the early ending of the epidemic. In other words, it will save lives, prevent suffering, and lessen economic hardship if all of us for a short time do our utmost to stamp out this epidemic than to use only half-way measures extending over a long period of time. I appeal to the people of this city to observe the regulations of the Health Authorities and to assist in the enforcement of all preventive measures. The people will appreciate that the continuance of the epidemic in Portland and other cities in the United States will go far to seriously cripple the output of ships and to otherwise impede in many ways the successful furtherance of the Nation's war programme. It is not merely a local problem; it is a National question, and as in the past we must work shoulder to shoulder for our mutual interests. Statistics unmistakably show that the epidemic is on the increase where people are permitted to congregate and these regulations have been issued to prevent, where possible, groups of people from assembling.

"The order requiring stores and offices to close at 3:30 and 4 P. M., respectively, and the release of employes at such time is made for the purpose of preventing the usual congestion existing between the hours of 4 P. M. and 6:30 P. M."

*Oregonian*, November 4, 1918.

the patient's doctor asked more, they had only to call the Health Bureau for a list of those who charged the regular price.<sup>4</sup>

Despite the steady spread of the disease, efforts for its prevention were in no way relaxed. Fresh air was considered to be of greatest value in prevention. The traction company put all of its open cars into service. Built expressly for summer use, the seats were arranged transversely across the car and there were no sides, aisles, doors or windows. The conventional cars were operated with all windows wide open, and in some instances, the doors were nailed open. Crowding was not permitted. Upon several occasions car crews were haled into court for violation of these regulations.<sup>5</sup> People in cafeterias were required to maintain a distance of four feet between them, and all food had to be protected from possible contamination. The spacing regulation was also employed when checking out books from the Public Library. All chairs were removed from the library to prevent loitering.

When the city officials decided to request early closing, so that "rush hour" crowds would be decreased, the merchants did their best to assist in the fight, advertising their new hours of 9 a.m. to 3:30 p.m.<sup>6</sup> Meier and Frank Company advertisements asked people not to come to the store unless purchases were absolutely necessary. They discontinued advertising of merchandise and asked their patrons to order necessary goods by telephone.<sup>7</sup> At the same time the Pacific Telephone Company was appealing to people to limit all telephone calls to a minimum because of the shortage of operators due to influenza. There were advertisements asking people to use the Home Telephone Company phones whenever possible. The "Home" phones were automatic, and were operated by dials. They belonged to a rival company.

Meier and Frank Company informed their patrons that

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4. *Oregonian*, October 25, 1918, p. 11.

5. *Oregonian*, November 3, 1918, p. 7, col. 2.

6. The city merchants reached general agreement on the hours. An Olds, Wortman & King ad is in the *Oregonian* of November 1, p. 9, ads for Roberts Brothers and Lipman and Wolfe in the November 5 issue, pp. 2 and 3.

7. *Oregonian*, November 5, 1918, p. 20.

they were making every effort to protect those who did find it necessary to come to the store, describing their routine prevention program. All uncarpeted floor areas, including elevators, were cleaned daily with a strong germicide. The elevator shafts were fumigated each night. All carpeted floors were vacuumed daily, telephone mouthpieces were swabbed with germicidal agents each day. In order to improve ventilation and promote better circulation of air, aisle tables were removed.<sup>8</sup>

Another measure designed to discourage loitering and crowding was a city-wide regulation prohibiting the sale of candy, ice cream and tobacco before 9:00 a.m. and after 3:30 p.m. Garages were forbidden to sell supplies after 3:30 p.m. and all office buildings and manufacturing plants were to be closed at 4:00 p.m. All persons were ordered to wear masks when outside of their homes, a measure used nationally from its reflection in nationally-syndicated cartoons. This was a difficult regulation to enforce because there was such a wide difference of opinion as to the effectiveness of the mask. Dr. Parrish did not approve of the use of masks excepting in the hospitals, maintaining that there was less likelihood of contamination from fresh air than from air breathed through a filthy mask.<sup>9</sup> The masks of most workers were anything but clean when the day was finished. Across the Columbia River in Vancouver, citizens were fined as much as \$50 for appearing in public without a mask and fines were levied in San Francisco for the same reason.

The importance of fresh air in prevention led to an appeal to automobile owners to report to the auditorium whenever possible to give rides to the soldiers. It was felt that a ride in the fresh air after coming off duty would help prevent them from becoming victims. The drivers were given assurance that it was safe for them to mingle with the personnel because all had to wear caps, masks and gowns when on duty. Advertisements for patent medicines emphasizing their flu-curing properties appeared in increasing numbers, and the health officer caused the publication of a list of effective gargles,

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8. *Oregonian*, November 7, 1918, p. 18.

9. *Oregonian*, November 1, 1918, p. 18, col. 1.

etc., and gave the average cost that should be charged for them. The Christian Science Society also published advertisements pertaining to their activities. Warnings to avoid the use of alcoholic beverages were printed by the U.S. Public Health Service, although it was recommended in the treatment of pneumonia in certain stages.

One E. Carmichael Davis wrote a letter published in the *Oregonian* on October 22, stating that he had served in the London epidemic of 1889-90-91 and that he held an M.D. degree from McGill University. He quoted the advice of Sir Henry Thompson, "(a strict physician of the temperance school): 'Never curb a sneeze—it is an effort of the heart to restore circulation.'" Davis felt "that Americans have laid themselves open to so many fatal terminations by their habits. The sleeping in heated rooms; the use and abuse of the automobiles and their ridiculous dress! Silk socks for working men and women on feet subject to perpetual draughts and the short skirts and immodest waists of the women—all lead to weakened health." He did not mention the four thousand deaths that had already occurred in London from the current pandemic.

On October 22, when auditorium hospital facilities were being expanded into the wings and on the stage, the *Oregonian* reported a total of 1,161 cases for Portland for the past three weeks. The daily state statistics on new cases were listed as follows:

|            |    |             |    |
|------------|----|-------------|----|
| Corvallis  | 22 | Ashland     | 7  |
| Pendleton  | 23 | Bend        | 2  |
| Moro       | 50 | Grants Pass | 3  |
| Coquille   | 10 | Polk County | 17 |
| Salem      | 10 | Wasco       | 12 |
| Gold Beach | 5  | Hillsboro   | 7  |
| Marshfield | 5  |             |    |

Four days later, there was a football game between the Fifth Spruce Squadron team and the 105th-106th Squadron team, but no spectators were allowed. On the 29th, the Kruse and Banks Shipyard in Coos Bay required its 1,000 workers to wear masks, and shortened the work day. As the

disease continued its course in November, court sessions in North Bend were halted on the eighteenth, and an elaborate Thanksgiving celebration planned for the Coos Bay area was called off because of the ban on gatherings.

As one would expect, the morgues and undertaking establishments in all areas were crowded. The big difficulty was lack of manpower. Oregon undertakers had no serious difficulties in obtaining chemicals and coffins, but were hard-pressed for embalmers and grave diggers. All of these persons worked long hours. It was difficult to schedule funerals because of the heavy demand for such services, and families had to wait their turn. Even though the churches were closed, the ministers, too, worked long hours holding funeral services and comforting the sick and bereaved.

School teachers were pressed into service to canvass assigned districts to determine the presence of anyone in need of medical care. They also distributed literature pertaining to prevention. Many unattended cases were discovered, particularly in areas predominantly oriental. In early November a Japanese ward, attended by a Japanese physician, was opened at the auditorium, and twenty Japanese patients were moved into this facility.

It is easy to believe that although the situation was serious there was a disproportionate amount of hysteria. There was only one ambulance company operating in Portland and their equipment was kept running around the clock. Ben Buck, the owner of the company, recalls that frequently they would receive instructions to proceed to a given address and to enter without waiting to be admitted. The patient would be found alone, the family having left for fear of contracting the disease. In other instances they would be met at an intersection by the father who would point out the house where his wife and children lay prostrate but he would not enter the house with the crew. The ambulances in that day were equipped only with stretchers which forced the attendants to carry the patients up and downstairs. They found that they could not wear face masks because these interfered with their breathing. Mr. Buck states that even though his men worked long hours in all sorts of weather

throughout the pandemic not one of them contracted influenza.

After the middle of November the intensity of the epidemic began to weaken. It was fortunate that was the case, since the official announcement of the armistice on November 11 caused jubilant rejoicing and plans for a large celebration in Portland on the 16th.<sup>10</sup> Churches and theaters were reopened November 15, and schools and other gathering places on the following day. Even though the schools were reopened, there was great reluctance on the part of many parents to permit their children to attend. A week after the ban was lifted the death rate had leveled off to around ten per day. By December the pandemic was definitely on the way out as far as Oregon was concerned. There were some recurrent outbreaks from time to time during the next twelve months, but nothing of epidemic stature. The Oregon State Board of Health, for the period of October 1, 1918, to September 30, 1920, listed 48,146 cases with 3,675 deaths from influenza within the State of Oregon.

This disease has been studied intensively throughout the years that have intervened. The causative organism is now identified as a filterable virus of three distinct types known as A, B and C. Each of these major types has numerous strains, each capable of producing symptoms. Once infected the body begins to build up defenses against the invader. If this defense is successful the patient recovers, and from that time on carries a partial or sometimes a permanent immunity to that particular strain.

As long as man carries sufficient resistance to keep these organisms under control, he goes about with nothing more than an occasional mild outbreak of the "flu" or the "grippe."

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10. False reports of the armistice gave rise to November 9 *Oregonian* headlines that "Undue Celebration Effect is Feared," "Health Officials Say Influenza May Increase. 441 New Cases in City." Two days later, when the official armistice announcement was made, the paper reported that the number of cases had declined and the city ban on meetings would soon be lifted. While Mayor Baker went ahead with celebration plans for Saturday, November 16, the State Health Office was not in favor of lifting the ban so soon. *Oregonian*, November 11, p. 12; November 12, p. 8, p. 16.

As time passes there are more and more people brought into the world who have had no contact with these organisms and therefore they possess a weakened resistance, or none at all. Their numbers increase as the years go by until they constitute a huge multitude of people. The influenza viruses reproduce themselves just as continuously as does man. In the process of reproduction an occasional freak or "sport" virus may appear. If this strain happens to be a particularly virulent one, against which man has had no opportunity to build a specific immunity, it becomes a rampant renegade that ruthlessly attacks everything before it. It continues its onslaught as long as there are susceptible victims available. As man dies from it, or perfects some resistance to it, either from within his natural system of defense or aided by vaccines prepared in laboratories, it gradually dies out.

Thus do pandemics come into being, bringing death, misery and great economic loss, and thus do they wax and wane. These are the reasons why our public health agencies must keep ever constant vigilance, and this is why theirs is a vital and never-ending task.