Epidemic and Public Health: Influenza in Vancouver, 1918-1919

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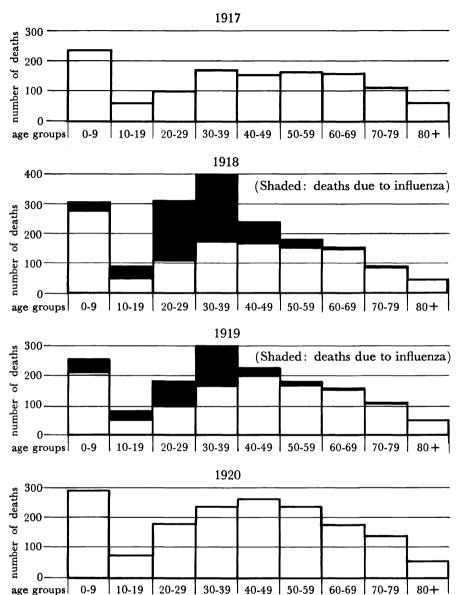
TABLE 1
INFLUENZA DEATHS FROM THE BEGINNING OF THE EPIDEMIC TO THE END OF JANUARY 1919

City	Deaths	Death Rate per 1,000 of population per annum	
Spokane	428	8.3	
Seattle	1,328	11.1	
Chicago	12,400	12.4	
St. Louis	3,207	13.4	
Portland	1,363	13.5	
Toronto	2,284	14.3	
New York City	27,362	14.4	
Newark	2,348	15.8	
Winnipeg	1,021	16.7	
Los Angeles	2,969	17.0	
Buffalo	2,742	18.8	
Boston	5,771	19.1	
Washington	2,892	20.8	
Pittsburgh	4,972	22.9	
San Francisco	3,616	23.1	
Vancouver	795	23.3	
Baltimore	4,358	23.6	
Philadelphia	14,198	24.7	

Sources: Calculations were based on figures from: Crosby, op. cit., pp. 60-61.
Ontario, Thirty-Eighth Annual Report of the Provincial Board of Health of Ontario, Canada for the Year 1919 (Toronto: Printer to the King, 1920), p. 236. City of Winnipeg, op. cit., p. 10. The Vancouver Daily Province, 17 February 1919, p. 7. City of Vancouver, Annual Report for Year Ending December 31, 1918 (n.p., n.n., n.d.), p. 73.

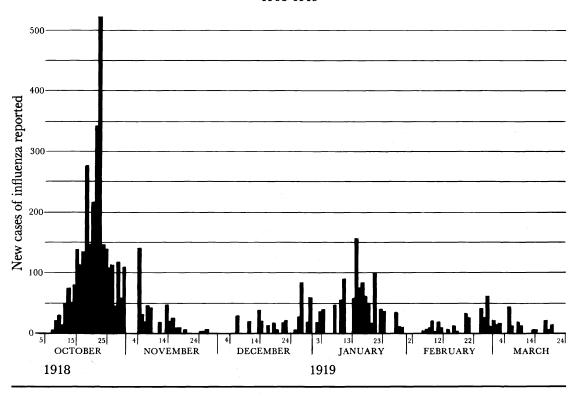
^{*}The author wishes to acknowledge the research assistance provided by a Canada Council Doctoral Fellowship.

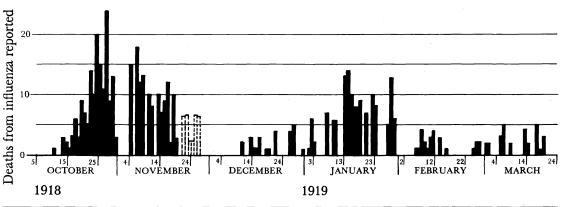
FIGURE 1
DEATHS BY AGE GROUP—VANCOUVER



Sources: City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1918 (n.p., n.n., n.d.), p. 5. City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1919 (n.p., n.n., n.d.), p. 13. City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1920 (n.p., n.n., n.p.), p. 13.

FIGURE 2 COURSE OF THE INFLUENZA EPIDEMIC, VANCOUVER 1918-1919





Sources: The Vancouver Daily Province and The Vancouver Daily Sun, October 1918 through March 1919.

In time of epidemic, public health services, usually the preserve of a small group of professionals and dedicated laymen, are thrust into the limelight of public attention and subjected to great stress. In Vancouver during the 1918-1919 influenza epidemic, the combination of a high level of public concern and a threatened breakdown in delivery of crucial public health services reinforced the trend of the preceding few decades toward centralization of power over public health matters in the hands of designated bureaucratic specialists, and, paradoxically, increased the power of the public at large. The working out of these two tendencies can serve as an outline for the evolution of the politics of public health in Vancouver during the epidemic period.

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The influenza pandemic of 1918-1919¹ was devastating. No other infection, war or famine has killed so many in so short a period of time. Millions died within a year, and perhaps a quarter of the world's population was ill with the disease. In British Columbia, the provincial Board of Health estimated that at least thirty per cent of the province's population suffered from an attack of influenza.²

The pandemic was baffling for medical authorities, both because its victims were not those they expected, and because the epidemiological pattern itself was erratic. The influenza death rate among young adults

¹ There are two recent book-length studies on the influenza pandemic of 1918-1919. The better of these is Alfred W. Crosby, Jr., Epidemic and Peace, 1918 (Westport, Conn.: Greenwood Press, 1976). Its clear discussion in non-technical language of the bacteriological aspects of influenza is particularly useful. Richard Collier, The Plague of the Spanish Lady. The Influenza Pandemic of 1918-1919 (London: Macmillan, 1974) is world-wide in scope and anecdotal in approach. For two vivid literary accounts of epidemic experiences, see Katherine Anne Porter, Pale Horse, Pale Rider (1939; rpt. New York: Harcourt, Brace, 1947) and Thomas Wolfe, Look Homeward, Angel (1929; rpt. New York: Random House, n.d.), chap. xxxv. For recent medical discussions of influenza, see F. T. Perkins and R. H. Regamey (eds.), International Symposium on Influenza Vaccines for Men and Horses (Basel: S. Karger, 1973); V. M. Zhdanov, V. D. Solv'ev, and F. G. Epshtein, The Study of Influenza, trans. Russian Scientific Translation Program, Division of General Medical Science, National Institute of Health, U.S. Dept. of Health, Education, and Welfare, Public Service Publication No. 792 (Washington: U.S. Government Printing Office, 1960); William J. Mogabgab, "Influenza," Communicable and Infectious Diseases, ed. by Franklin H. Top, Sr. and Paul F. Wehrle (7th ed.; St. Louis: C. V. Mosby, 1972); Harry M. Rose, "Influenza: The Agent," Hospital Practice, VI (August 1971), 49-56; and Alexander D. Langmuir, "Influenza: Its Epidemiology," Hospital Practice, VI (September 1971), 103-08. These works indicate that influenza is, in many ways, as baffling a disease now as it was early in this century.

² Crosby, op. cit., p. 311, p. 205. British Columbia, Board of Health, Twenty-Third Annual Report, for the year ending 30 June 1919 (Victoria: King's Printer, 1920), p. B 6.

was surprisingly high.⁸ (Vancouver figures support this impression. See Figure 1.) Unlike such communicable diseases as tuberculosis and typhoid fever, influenza did not show a clear preference for the poorly fed and poorly housed. Certain groups — gasworks employees and Cornish tin miners — were only lightly touched by the epidemic; others — coal miners and pregnant women — suffered high mortality rates. The epidemic's rate and pattern of development differed from place to place, as did its intensity. Although the pandemic reached both Philadelphia and Pittsburgh at about the same time, it crested in Philadelphia three weeks before it did in Pittsburgh. Some cities, Vancouver among them, suffered three waves of infection; others had only one, followed by a series of inconspicuous ripples.⁴ Death rates ranging from 8.3 to 24.7 per 1,000 population per annum were reported for North American cities. (See Table 1.)

Similarly, usual procedures for controlling the spread of epidemic diseases were found ineffective. While there were proponents of various procedures — administration of vaccine, isolation of the sick, segregation and quarantine of contacts, wearing of face masks, disinfection of public buildings — none of these were sufficiently successful to enlist solid support among those responsible for public health.⁵

The identity of the micro-organism responsible for influenza was far from clear. Pfeiffer's bacteriological work during the 1890 influenza pandemic had led many medical men to accept the bacillus bearing his name (also called *Hemophilus influenzae*) as the etiological agent of pandemic influenza. However, during the 1918-1919 pandemic, Pfeiffer's bacillus was strangely absent from some cultures made from materials taken from individuals who were suffering from what, on a clinical basis, was clearly

1918 (n.p., n.n., n.d.), p. 15.
Great Britain, Ministry of Health, Report on the Pandemic of Influenza 1918-1919, Reports on Public Health and Medical Subjects No. 4 (London: His Majesty's Stationery Office, 1920), p. xiv, p. 279. City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1919 (n.p., n.n., n.d.), p. 5. City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1918 (n.p., n.n., n.d.), p. 5.

³ In New York City, 67 per cent of all deaths from pneumonia and influenza were in the fifteen to forty-five age group, and the greatest number of deaths was reported for those in their twenty-eighth year. William H. Guilfoy, "Statistics of the Epidemic of Influenza in New York City," New York City, Dept. of Health, Monthly Bulletin, VIII (December 1918), 270. New York's pattern was typical. City of Winnipeg, Annual Report of the Department of Health for the Year Ending 31st of December, 1918 (n.p., n.p., n.d.), p. 15.

⁴ Crosby, op. cit., p. 227, p. 64. Collier, op. cit., p. 228, p. 219.

⁵ City of Winnipeg, op. cit., pp. 10-15. T. H. Whitelaw, "The Practical Aspects of Quarantine for Influenza," The Canadian Medical Association Journal, IX (December 1919), 1070. Arthur Newsholme et al., Influenza, A Discussion (London: Longmans, Green, [1919]), p. 3.

influenza. This led some bacteriologists to conclude that a filtrable virus was the responsible micro-organism. However, since techniques for isolating and identifying viruses were only beginning to be explored, experiments designed to establish viral responsibility were not conclusive.⁶

Even diagnosis and treatment of influenza were problematical. Symptoms varied in type, in severity and in duration. In some cases body temperature was comparatively low and pulse rate very high; in other cases the reverse was true. Cases which ended fatally might experience either hiccough and vomiting for several days prior to death or lassitude to the point of apathy, with absence of complaint of any kind. Complications were common, but were not of any one particular kind; nor were they more frequent in severe than in mild cases. A doctor could not recommend any clear-cut course of treatment. No drug or vaccine could be depended upon to alter the course of the disease. Although nursing care was seen as the single most important part of treatment, there was an acute shortage of nurses, and although hospitals had nurses, a prescribing doctor had to weigh the deleterious effects of moving a patient any great distance against the benefits of hospital nursing care. Even if he wished to hospitalize his patient, there might well be no bed available.

It is ironic that, after decades of spectacular advance in medical knowledge and technology, and a concomitant increase of popular faith in medicine, the influenza pandemic reduced the medical community to a state of helplessness not unlike that which prevailed during the epidemics of the pre-bacteriological era.

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- 6 Hattie E. Alexander, "The Hemophilus Group," Bacterial and Mycotic Infections of Man, ed. Rene J. Dubos and James G. Hirsch (4th ed.; Philadelphia: J. B. Lippincott, 1965), pp. 724-25. "Editorial," The Canadian Medical Association Journal, IX (November 1919), 1022. Newsholme, op. cit., p. 95. "Provincial Board of Health of Ontario Influenza," Public Health Journal, X (January 1919), 28. Crosby, op. cit., chap. xiii. W. L. Somerset, "Clinical Notes on the Influenza Epidemic," New York City, Dept. of Health, Monthly Bulletin, VIII (December 1918), 278. British Columbia, Board of Health, op. cit., p. B 6. N. C. Parsons, "Official Report on Influenza Epidemic 1918," Canadian Medical Association Journal, IX (April 1919), 351. The Vancouver Daily Province, 2 November 1918, D. 2.
- ⁷ Archibald Dixon, "Hospitalization of Influenza Patients by the Department of Health," New York City, Dept. of Health, Monthly Bulletin, VIII (December 1918), 281. Somerset, op. cit., pp. 279-80. Whitelaw, op. cit., p. 1072.
- 8 Great Britain, Ministry of Health, op. cit., pp. 92-94. Dixon, op. cit., p. 282. Newsholme, op. cit., p. 76, p. 63, pp. 100-01. In the last reference, Major A. Abrahams, R.A.M.C. said, "I can without hesitation assert that there is hardly any sort of treatment which we have not tried, and that not one single line of treatment can be credited with any real value."

The bare facts concerning Vancouver's epidemic are these: Influenza reached Vancouver on 5 October 1918. The disease spread rapidly, the number of reported cases reaching a peak of 522 on 22 October. The deaths peaked five days later, with twenty-four reported on 27 October. A second, more virulent but less extensive, wave crested on 14 January, when 156 cases and fourteen deaths were reported. The last wave culminated with nineteen deaths in the week ending 8 March. By the end of March it was over. (See Figure 2.) At a conservative estimate, the epidemic sickened 30,000 and killed 900 of a population of about 100,000.

The epidemic put tremendous strain on doctors and nurses, the community's first line of defence against sickness. Local doctors were quickly swamped. Emergency calls from outside their practices made normal attention to their usual patients' needs impossible. Doctors worked until they collapsed from exhaustion, and then called upon colleagues to carry on for them.¹¹ The shortage of nurses was acute. Since many had gone to war, there were only 200 graduate nurses normally on call in the city in 1918. By early January 1919, with many ill with influenza or acting as nurses for their own families, only 125 of these were available for duty. Graduate nurses were therefore not generally available for home nursing,

- ⁹ City of Vancouver, Annual Report for the Year Ending December 31, 1918 (n.p., n.n., n.d.), pp. 72-73. City of Vancouver, Annual Report for the Year Ending December 31, 1919 (n.p., n.n., n.d.), p. 81. The Vancouver Daily Province, 15 January 1919, p. 7; 11 February 1919, p. 7.
- 10 Precise morbidity and mortality figures are not available for Vancouver for the sixmonth epidemic period. My figures are calculated as follows: For the period 5 October to 31 December 1918, there were 4,890 reported cases and 618 reported deaths. For all of 1919, there were 329 reported deaths. Assuming a constant ratio of cases to deaths yields an estimate of 2,603 reported cases in 1919. The acting Medical Health Office for Vancouver estimated, when the reported cases tallied about 4,000, that the actual number of cases in the city was between 15,000 and 16,000. Using this proportion yields an estimated actual number of cases for the 15-month period (5 October 1918 to 31 December 1919) of between 28,100 and 30,000. There were 947 reported deaths for the 15-month period. The figures cited in the text are rounded and based on the assumption that most influenza cases and deaths for 1919 occurred during the epidemic period. The morbidity figure accords with the provincial estimate that 30 per cent of the province's population was ill. Figures used in my calculations come from: City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1918, p. 26. City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1919, p. 5. The Vancouver Daily Province, 8 November 1918, p. 15.
- 11 H. Norman Lidster, "Memories of Sixty Years," New Westminster, B.C., September 1964, University of British Columbia Library, Special Collections, p. 21. The author recalled having five different doctors attend him during his bout of influenza. Interview with T. Henry Hall Milburn, physician, 16 February 1977. The Vancouver Daily Province, 21 October 1918, p. 2; 30 October 1918, p. 4. Epidemics always place a heavy burden on a community's doctors, but the 1918-1919 influenza

so their place was taken by practical nurses, women who had completed only part of their nurses' training, or simply by the ablest members of afflicted households. Hospitals recruited women from the community as emergency nurses, sending them into wards to assist with a mask, a robe, a clinical thermometer and as little as thirty minutes' training.¹²

Governmental response to the community's health needs in this period of insufficient medical resources was largely determined by Dr. Frederick T. Underhill, the city Medical Health Officer. In 1918, this sixty-year-old Scot was a familiar and respected part of Vancouver's medical scene. He had arrived in the city before the turn of the century, was appointed its first full-time Medical Health Officer in 1904, and was subsequently president of the Vancouver Medical Association. He had a reputation for firmness and principle, but was tolerant and gentle in his ways. ¹³ Underhill had two fundamental purposes in his work during the epidemic period: to control the disease's spread, and to ensure that the sick and convalescent who needed assistance received it.

Underhill's policy for control of the spread of influenza was a conservative one, reminiscent of the sanitarian approach popular in mid-nine-teenth-century Britain. He advocated an old-fashioned reliance on personal hygiene, fostered by public health education campaigns, and on community sanitation. In September, when influenza was clearly working its way toward Vancouver along the lines of travel, Underhill wrote to

epidemic struck when Vancouver had its largest patient/doctor ratio for the decade. The ratios are:

1911	66o	1916	630
1912	640	1917	68o
1913	610	1918	68o
1914	540	1919	670
1915	56o	1920	600

These figures are based on research which used: College of Physicians and Surgeons of British Columbia, Medical Register, 1910-1911, 1912-1913, 1913-1914, 1914-1915, 1916-1917, 1918, 1919, 1920; Henderson's Directories for the city of Vancouver for the years 1911 through 1920; City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1916 (n.p., n.n., n.d.), p. 12; City of Vancouver, Dept. of Health, Medical Health Officer's Report for Year 1921 (n.p., n.n., n.d.), p. 12.

¹² Lidster, op. cit., p. 21. Milburn, interview cited. The Vancouver Daily Province, 26 October 1918, p. 7; 31 October 1918, p. 18; 6 November 1918, p. 7; 11 January 1919, p. 8. One patient in the emergency hospital at King Edward School reported that there were only two nurses and two helpers to look after 203 patients one night. Ibid., 24 October 1918, p. 3.

¹³ Milburn, interview cited. "Biographies of Early British Columbia Doctors," three unpublished volumes, University of British Columbia, Woodward Library, Memorial Room, no pagination.

Dr. Henry Esson Young, Secretary of the provincial Board of Health, urging that educational bulletins be issued throughout the province. Within his own sphere of operation, he issued educational materials for adults and children in the form of leaflets and press releases. These urged adults to avoid crowds, wet feet, low necklines, and public towels and drinking cups, and advocated "the three C's" (clean mouth, clean skin, clean clothes), the covering of coughs and sneezes, and the opening of windows for ventilation. For children, he gave such homely advice as: Don't take a lick off another child's sucker. Don't play in muddy ditches. Swat flies — they carry germs. Keep your school desk clean and tidy.14 In the early days of the epidemic. Underhill promoted such sanitation measures as fumigation and disinfection of public gathering places, and the adjustment of public drinking fountains to arc rather than shoot vertically. 15 In view of the inability of medical science to control influenza, Underhill's preventative policy was sensible — capable of improving the general level of community health and unlikely to do harm.

More drastic measures were taken in a number of North American cities during the pandemic. These included prohibition of any kind of public meeting, closure of schools, compulsory wearing of influenza masks, and reduction in commercial hours of business. In fact, because of the highly contagious nature of influenza and the frequency of subclinical cases, none of these measures was particularly effective, It but a number of renowned public health figures favoured their use during the pandemic. As influenza became epidemic in Vancouver, its government was urged to impose regulations following these precedents.

From the beginning of the epidemic, R. H. Gale, the mayor of Vancouver, advocated town closure (a term which in the event meant the shutting of schools, churches, and recreational facilities, and the banning of public gatherings). He was a master of soothing, boosterish statements

[&]quot;Spanish Influenza," a bulletin in the Vancouver City Archives, RG 3, vol. I, 1918, Mayor's Correspondence, folder entitled, Influenza Epidemic. City of Vancouver, Health Committee Minute Book, 30 September 1918, in the Vancouver City Archives, RG 2, Series B-2. The Vancouver Daily Province, 17 October 1918, p. 16; 8 October 1918, p. 2.

¹⁵ Ibid., 7 October 1918, p. 16; 11 October 1918, p. 27; 17 October 1918, p. 14; 14 October 1918, p. 16; 18 October 1918, p. 20.

¹⁶ Crosby, op. cit., p. 74, pp. 101-06. Great Britain, Ministry of Health, op. cit., p. 275. The Vancouver Daily Province, 15 October 1918, p. 14; 31 October 1918, p. 4.

¹⁷ Mogabgab, op. cit., p. 337.

¹⁸ For example, Surgeon General Rupert Blue of the U.S. Public Health Service. Crosby, op. cit., p. 74.

and irrelevant distinctions — "It is safe to state that there has been no local outbreak [of influenza], the cases reported being the result of contact [with outsiders] only." — which were seemingly dictated by his perception of the public mood. As the first cases appeared in town, he promised to close schools if even one case of influenza developed in them, and to close the town "in every sense of the word" if the epidemic developed to any extent. However, for nearly two weeks, even though the epidemic spread, the mayor and other proponents of town closure did not prevail against Underhill's views. ²¹

Underhill believed that town closure would be ineffective because hundreds would still gather together daily in large industrial plants and department stores. Moreover, he believed it would be positively harmful to the health of children, who, with schools closed, would be removed from the close surveillance of teachers and school medical staff on guard for influenza symptoms, and would instead be free to roam the streets, exposing themselves to various sources of infection and neglecting early signs of the disease. It was this argument, concerning children's health, which Underhill used most frequently against proponents of town closure.²²

The schools, however, could be closed either by a decision of the school board or by a provincial order-in-council given in response to a request from the municipal government. Thus, if Vancouver's schools were to stay open, Underhill had to convince both the school board and the city council that his policy was in the best interest of the public at large. Underhill's contact with the school board was mainly through Dr. Robert Wightman, a newcomer to town, who had recently been appointed chief school medical officer.²³ In their frequent conferences, Underhill had the

¹⁹ The Vancouver Daily Province, 11 October 1918, p. 27.

²⁰ Ibid., 7 October 1918, p. 16.

²¹ Gale clearly felt that he should defer to medical expertise. Ibid., 7 October 1918, p. 16; 16 October 1918, p. 5. In the latter reference he is quoted as saying that he would ask "the medical men to explain to myself and other laymen present why they persist in keeping the city open."

²² Ibid., 16 October 1918, p. 5; 9 October 1918, p. 18. At approximately the same time the well-known chief of the Bureau of Child Hygiene in New York City, Dr. Sara Josephine Baker, was convincing the city's Health Commissioner to keep schools open on similar grounds. The New York schools stayed open, as did those in Chicago and New Orleans. Collier, op. cit., pp. 150-52.

²³ The Vancouver Daily Province, 16 October 1918, p. 5. British Columbia, Dept. of Education, The Public Schools of the Province of British Columbia, Forty-Eighth Annual Report 1918-1919 (Victoria: William H. Cullen, 1920), p. PA39. Master Register of the College of Physicians and Surgeons of British Columbia. Henderson's Directories for the city of Vancouver.

advantage of greater age, long familiarity with the community and an established reputation. It would have been natural for Wightman to defer to his judgment, and indeed Wightman did staunchly support Underhill's open school policy.²⁴ As an employee of the municipal government, Underhill had direct influence on the city council. On 8 October, when there were still only a handful of influenza cases in town, he met with Alderman W. R. Owen, chairman of the city council's Health Committee, Dr. E. D. Carder, assistant city Medical Health Officer, and Wightman. They decided not to close the schools.²⁵ Five days later, on a Sunday morning, there was a meeting of the executive of the Vancouver General Hospital Board, the president of the Vancouver Medical Association, and members of city council. Although the number of influenza cases was increasing rapidly (there were 100 reported on the Saturday and 217 on the Monday), this meeting approved Underhill's policy of keeping the schools open.²⁶.

The broader issue of town closure was more controversial. The initial controversy was not within the municipal government (on 10 October the city's Health Committee met and decided that a general closure was not warranted), but between Vancouver and other parts of the province. By the middle of October, sixteen municipal governments had applied to the province for general closure orders. Responding to expressions of fear that, if Vancouver did not close, the contagion would spread to the closed towns, the provincial government pressed Vancouver to conform. Eventually the city of Victoria went so far as to approach the provincial government regarding quarantine against Vancouver. Young, the secretary of the provincial Board of Health, appears to have been sympathetic to the appeals for Vancouver to close. His judgment was likely to carry weight, not only because of his official position, but because he was a talented doctor, a former provincial cabinet minister, and a national leader in the field of public health.²⁸

²⁴ The Vancouver Daily Province, 16 October 1918, p. 5.

²⁵ Ibid., 9 October 1918, p. 18; 8 October 1918, p. 2.

²⁶ Ibid., 12 October 1918, p. 2; 14 October 1918, p. 16.

²⁷ The Vancouver Daily Province, 11 October 1918, p. 27; 16 October 1918, p. 5; 17 October 1919, p. 1.

²⁸ As Provincial Secretary and Minister of Education in Richard McBride's government, he had been responsible both for health and education, and had drafted the 1910 bill to establish annual medical examinations for children in the provincial schools. He was to be president of the Canadian Public Health Association in 1919-1920. "Biographies of Early British Columbia Doctors," loc. cit.

In the midst of these rising pressures for closure of Vancouver, Gale, Owen and Underhill met on Tuesday, 15 October, and decided that Underhill should meet with representatives of the provincial government to discuss the influenza situation.²⁹ The ensuing meeting, which took place in Victoria later that same day, was a confrontation between two schools of medical opinion about control of influenza. Young and his colleagues clearly thought that Underhill and Vancouver's municipal government were misguided and stubborn. They could not understand Vancouver's attitude in maintaining an open town, and they felt that Vancouver, as the largest centre, should set an example and adopt some form of town closure. Although the provincial representatives said they did not wish to use threats, they made it clear that, if the influenza epidemic did not subside, the provincial government might feel compelled to step in with a general closure order. Underhill refused to retreat from his fundamental position that Vancouver's children were best protected by remaining in school, but he realized that some compromise was necessary to prevent the provincial government from shutting down Vancouver, including its schools. He therefore suggested that Vancouver might be willing to adopt a partial closure, which would shut theatres, moving picture houses, libraries, public dances, and pool rooms, but leave schools and most businesses unaffected.30

Also on Tuesday, 15 October, the school board met to discuss, among other items of business, the question of school closure. Wightman reported that 1,887 pupils (of a total enrollment of about 16,000) were absent from school. This was approaching twice the usual number of school absentees. When the trustees asked for his opinion of school closure, Wightman replied that he was opposed to closing the schools and wished to keep the children in school under surveillance. Nevertheless, Trustee T. P. Hall, a doctor, proposed that all schools except the school for the blind be closed immediately. Members of the board expressed concern over the influenza situation, but, instead of acting then on Hall's suggestion, appointed a subcommittee (consisting of Wightman, the school inspector, and the two trustees who were doctors) to decide whether the schools should stay open.³¹

²⁹ The Vancouver Daily Province, 15 October 1918, p. 14.

³⁰ The Vancouver Daily Province, 16 October 1918, p. 5.

³¹ Vancouver School Board Minutes, in the Vancouver City Archives, RG 8, A2 V6, 15 October 1918. The Vancouver Daily Province, 16 October 1918, p. 5; 17 October 1918, p. 5, p. 14. The Vancouver Daily Sun, 16 October 1918, p. 8.

Thus it seemed likely on Wednesday morning that at least partial closure would be imposed on the city, and that the schools might be closed by the school board regardless of Underhill's firm contention that such a step would be detrimental to the children's health. At this juncture, the Health Committee chairman, who supported Underhill's position, suggested that a meeting with representatives of various community organizations be held to discuss the issue of town closure. Mayor Gale agreed, and asked that representatives from the Board of Trade, the Manufacturers' Association, the Rotary Club, the Trades and Labor Council, the Central Ratepayers' Association and a number of women's organizations gather at City Hall at 5:00 p.m.³²

Although there were a few aldermen who opposed the meeting because it would delay a decision or infringe upon city council's responsibilities, Underhill and the Health Committee (which had met Wednesday morning) supported it. The meeting would provide an opportunity to convince members of the public that both the plan for partial closing and the open school policy were wise. In view of mounting pressure within the city for general closure, winning a significant measure of public support was particularly necessary for Underhill's policy to prevail.³³

At the meeting, the representatives of community organizations strongly supported Underhill's leadership of the fight against influenza, speaker after speaker asserting that any decision on town closing should be left to the discretion of the Medical Health Officer. However, opinion on the issue which concerned him most deeply — open schools — was divided. Some speakers agreed with him and wished the schools to remain open, some (school board representatives) feared that panic among parents and children and high absenteeism were so greatly disrupting the educational process that the schools had little choice but to close, and still others, including the president of the Vancouver Medical Association, believed that school closure was simply the proper response to the epidemic.³⁴

Following this meeting, the town closed down in three stages. Later Wednesday evening, the school board subcommittee met and, perhaps encouraged by the degree of support for school closure expressed at the earlier meeting, decided to close Vancouver's schools at noon on Friday,

³² The Vancouver Daily Province, 16 October 1918, p. 5.

³³ Ibid., 16 October 1918, p. 5; 17 October 1918, p. 5, p. 6.

³⁴ The Vancouver Daily Province, 17 October 1918, p. 5. The Vancouver Daily Sun, 17 October 1918, p. 8.

18 October, declaring that this seemed to be the prevailing public desire. 85 At an emergency meeting the next morning, the Health Committee decided to write the provincial health authorities for an order-in-council which would give the municipal health officer discretionary powers for partial closing of the city. However, the solid support for Underhill's policy exhibited at the previous day's Health Committee meeting had gone. Some committee members wanted immediate and complete closing of the city. In the end, Owen and Underhill prevailed, arguing that a request for discretionary powers for the Medical Health Officer was meeting the wishes expressed by the various representatives at Wednesday's meeting.36 Thursday evening Underhill met with Gale and Young (who had travelled from Victoria to examine Vancouver's influenza situation for himself) and indicated that he would use his discretionary powers to impose partial closure only.37 Next morning he had changed his mind and requested that the town close up tight, with all forms of public assembly, except those in factories, stores, and offices, banned under maximum penalty of 100 dollars fine or six months imprisonment.³⁸

Underhill's decision was made under increasingly critical conditions: Whereas there had been 135 influenza cases reported on the 17th, 278 were reported on the 18th. A number of these were coming into town from outlying areas — one boat arrived with forty cases from logging camps — posing further problems of accommodation for the overextended city health facilities. It may be that Underhill lost his nerve in the face of this growing crisis, or simply that he felt his energies better used combatting the epidemic than combatting public opinion. However, to understand Underhill's change of mind, it is sufficient to see that his major argument against town closure became inapplicable upon the closing of the schools.³⁹

³⁵ Ibid., 17 October 1918, p. 1. The Vancouver Daily Province, 17 October 1918, p. 6, p. 14.

³⁶ Ibid., 17 October 1918, p. 1, p. 14.

³⁷ The Vancouver Daily Sun, 18 October 1918, p. 3.

³⁸ The Vancouver Daily Province, 18 October 1918, p. 1, p. 20; 19 October 1918, p. 3. The procedure followed was this: Underhill called an emergency meeting of the city council for noon on Friday, 18 October, and asked it to approve application to the provincial government for an order-in-council. With council's consent, a wire was sent at 12:30. At 1:00 the provincial executive granted the order-in-council. The closure regulations were in effect until 19 November. Ibid., 19 November 1918, p. 1. City of Vancouver, Annual Report for the Year Ending December 31, 1918, p. 73.

³⁹ The Vancouver Daily Sun, 18 October 1918, p. 1. The Vancouver Daily Province, 18 October 1918, p. 1, p. 20; 30 October 1918, p. 4.

During the epidemic's last two waves. Underhill's preferred strategies prevailed, both in Vancouver (which had "opened" after a month) and with provincial health authorities. In Vancouver, when the second wave began to build in early December, Underhill carried on with his health education program and rejected Mayor Gale's apprehensive proposals for quarantine and renewed school closure.40 Provincial attention to Vancouver's health matters, evident during the October crisis, continued. Early in January 1919, Young called a conference of Medical Health Officers to discuss closure of schools in view of the new wave of influenza. At this meeting, a shift of opinion on town closure was evident, the general opinion being that such closure as had been imposed in October was ineffective, 41 and that any future closure regulations should also close down business and industry. With regard to school closure, Underhill converted Young to his views, to the extent that the result of the meeting was not more closures, but the opening of closed schools in the Victoria area.42 At a second influenza conference, held in late January, a few municipalities asked for renewal of the October regulations, but the majority were opposed to such stringency. Instead, the conference merely agreed to disseminate health education material, to ban dances, to placard homes with influenza cases, and to enforce sanitary regulations concerning ventilation, spitting, and common public towels and drinking cups. 43 Subsequently, Vancouver's press did carry the provincial board's educational bulletins, and its Health Department undertook a vigorous sanitary campaign, initiating a house-to-house sanitary inspection in the downtown area, and forcing compliance with sanitary regulations.44 It is ironic that the city was indeed finally "setting an example," but by taking the same sanitarian preventative approach for which it had been chided in October.

⁴⁰ The Vancouver Daily Province, 5 December 1918, p. 1; 10 December 1918, p. 4; 13 December 1918, p. 28.

⁴¹ Although this was the report of the press at the time, the Board of Health's annual report maintained that immediate and strictly enforced closure had resulted in lower death rates. British Columbia, Board of Health, op. cit., p. B6.

⁴² The Vancouver Daily Sun, 9 January 1919, p. 1. The Vancouver Daily Province, 7 January 1919, p. 1; 9 January 1919, p. 11.

⁴⁸ Ibid., 10 December 1918, p. 4; 23 January 1919, p. 2; 27 January 1919, p. 7, p. 11. The Vancouver Daily Sun, 27 January 1919, p. 4; 28 January 1919, p. 14; 29 January 1919, p. 2.

⁴⁴ The Vancouver Daily Province, 3 February 1919, p. 16; 10 February 1919, p. 16; 11 February 1919, p. 18; 12 February 1919, p. 8; 13 February 1919, p. 8; 4 March 1919, p. 16; 6 March 199, p. 20.

The second problem facing Underhill, other municipal authorities, and the community at large during the epidemic was care of the sick and convalescent. Hospital facilities were required by all who were seriously ill or had no one to care for them at home. Transients and the poor (of which Vancouver, as a seaport and rail terminal, had many) posed additional problems. Since sickness and death came to them when alone in rooming houses or tenements, they required discovery as well as proper care.

In October, as Saint Paul's Hospital and Vancouver General Hospital quickly filled to overflowing, Underhill and representatives of the General Hospital Board undertook the first of a series of improvisations to increase hospital space. At their request, the University of British Columbia (then located adjacent to the General Hospital) gave up its auditorium for use as a hospital. This facility accommodated 100 patients and was quickly filled. With closure of city schools on 18 October, the city Health Committee arranged for King Edward School (also adjacent to the General Hospital) to be equipped to care for 1,000 cases and to be staffed by the school board doctors and nurses. Strathcona School was taken over and converted into a hospital for the Japanese community. Schools were in normal use as the second epidemic wave began to build, so the city health authorities were obliged to search for other auxiliary hospital accommodation. They first considered taking over a downtown hotel, but then, after discussion with Young, who had come to Vancouver to investigate hospital space, they proposed the construction of a temporary influenza hospital to care for cases from all parts of the province, and to be equally funded by provincial and municipal governments. This proposal was accepted at both levels of government, and a 150-bed temporary hospital was constructed (at a cost of \$30,000) on the grounds of the Vancouver General Hospital, which operated it at city expense. It was ready for use within a month, just as the second epidemic wave was reaching its peak. 45

Municipal authorities were especially concerned about influenza among transients and the poor, and devoted considerable effort to assisting them,

⁴⁵ City of Vancouver, Council Minutes, in the Vancouver City Archives, RG 2 B.1, vol. XXII, 16 December 1918. The Vancouver Daily Province, 14 October 1918, p. 16; 15 October 1918, p. 14; 17 October 1918, p. 14; 18 October 1918, p. 20; 22 October 1918, p. 3; 5 November 1918, p. 4; 12 November 1918, p. 1; 14 December 1918, p. 21; 16 December 1918, p. 7; 20 December 1918, p. 4; 31 December 1918, p. 10; 15 January 1919, p. 7. The Japanese hospital was first established in a mission on Powell Street under the superintendence of three Japanese doctors, who relieved the city of all burden except payment of nurses. Ibid., October 1918, p. 20.

although with less than complete success. Transients were asked, through the press, to notify the Health Department immediately upon feeling ill, so that they could be seen by physicians. Department inspectors visited downtown hotels and rooming houses, investigating every case of illness and arranging for those who were sick with influenza to be sent to hospital in a city ambulance. Unfortunately, these cases were sometimes far advanced: Patients were frequently moribund when delivered to hospital, and on at least one occasion the inspector arrived too late to provide anything but burial.46 The Relief Department tried to help destitute influenza victims who remained in their own homes by providing food, medicine and bedding, and by sending volunteers into their homes to tend the sick, prepare meals, keep fires going and do other necessary chores.⁴⁷ Despite numerous appeals through the press by the Relief Officer and the Mayor, the number of volunteers for this work remained insufficient, 48 understandably: Middle-class women were unaccustomed to the arduous work and perhaps fearful of the squalour. Working-class women had little leisure time to give.49

Non-governmental agencies were also involved in helping the sick. Rotary Club members provided cars and drivers for a taxi-and-messenger service from the King Edward School influenza hospital. They fetched relatives of the dying, delivered discharged patients to their homes, and carried drugs to the hospital.⁵⁰ In the basement of Aberdeen School, the members of the Imperial Order of Daughters of the Empire prepared invalid foods, which they sold at cost to those able to pay and gave to

⁴⁶ City of Vancouver, Annual Report for the Year Ending December 31, 1918, pp. 72-73. The Vancouver Daily Province, 11 October 1918, p. 27; 14 October 1918, p. 16; 2 November 1918, p. 2; 15 October 1918, p. 14; 28 October 1918, p. 16.

⁴⁷ The Vancouver Daily Sun, 18 October 1919, p. 5. The City of Vancouver, Council Minutes, loc. cit., 19 November 1918; 2 December 1918; 27 January 1919; 24 February 1919; 8 March 1919; 24 March 1919.

⁴⁸ The Vancouver Daily Province, 1 November 1918, p. 7; 5 November 1918, p. 4; 6 November 1918, p. 17; 22 October 1918, p. 3; 24 October 1918, p. 3. In the last reference it was reported that the Relief Office had received fifteen new cases in the forenoon and not one volunteer.

⁴⁹ It appears that, typically, middle-class women nursed in hospitals and working-class women in homes. A sermon by Rev. Ernest Thomas described the two types of nurses in the following phrases: "... the good service rendered by cultured women and University professors who wore the white robes of the hospital...." and "... the specially arduous task of ministry in the homes of the helpless. This volunteer army recruited from organized labor and other circles has enriched our city's annals." *Ibid.*, 25 November 1918, p. 16.

⁵⁰ *Ibid.*, 23 October 1918, p. 8; 26 October 1918, p. 7.

those with a relief order.⁵¹ The St. Andrew's Ambulance Association gave nursing classes for volunteers willing to nurse influenza victims.⁵² A number of other organizations, including trade unions, the women's auxiliary of the Vancouver General Hospital, the Red Cross, and the Victorian Order of Nurses, helped provide food, clothing and nursing care.⁵³

Realizing that Vancouver's influenza services were not reaching all who needed help, some private groups and municipal officials began soon after the peak of the first epidemic wave to work for improvement in delivery of service. In early November, executives of two labour organizations, the Metal Trades Council and the Boiler Makers' Union, used the press to inform members of union influenza relief services. George Ireland, the city Relief Officer, systematized city relief efforts by dividing the city into twenty-seven districts, with investigators at work in every district to locate needy cases. No 5 November N. G. Neil, Secretary of the Employers' Association, together with representatives from the Metal Trades Council and the Boiler Makers' Union, approached city council with suggestions for more efficiently combatting the epidemic. A discussion with Ireland and city council members ensued, as a result of which a meeting of representatives from all the various agencies involved in assisting those ill with influenza was scheduled for the following morning.

This meeting, held on 6 November, created a centralized influenza organization for Greater Vancouver (suburban municipalities being expected to contribute funds). Its purpose was to eliminate duplication of effort and to distribute relief, medical care and supplies equitably. All the representatives present agreed to co-operate and to follow the directions of a five-member executive committee consisting of Ireland and representatives of labour, management, and women's organizations. The Employers' Association was to provide the names of those who were ill,

⁵¹ Ibid., 23 October 1918, p. 8; 30 November 1918, p. 8.

⁵² Ibid., 2 November 1918, p. 24.

⁵³ The Vancouver Daily Province, 21 October 1918, p. 2; 28 October 1918, p. 8; 31 October 1918, p. 8; 14 November 1918, p. 8; 5 December 1918, p. 10; 9 January 1919, p. 7. The British Columbia Federationist, 8 November 1918, p. 1, p. 3; 13 December 1918, p. 4; 31 January 1919, p. 1.

⁵⁴ The Vancouver Daily Province, 30 October 1918, p. 4; 2 November 1918, p. 2.

⁵⁵ List entitled, "Districts for investigation in Vancouver City," Mayor's Correspondence, Influenza Epidemic, loc. cit., The Vancouver Daily Province, 5 November 1918, p. 3.

⁵⁶ Ibid., p. 3, p. 4.

volunteer inspectors were then to visit the homes of those named, to report to the Relief Department the number in each household who were ill or had died, and to tell what was needed in the way of medical care, food and bedding. The required forms of relief would then be provided by participating organizations.⁵⁷ This experiment in co-ordination was sufficiently successful to be reactivated by request of city council when the second wave of influenza began to build.⁵⁸

To examine actions alone is to have an incomplete picture even of Vancouver's public response to the influenza epidemic, since attitudes were also an important part of the political reality. Although the epidemic quickly affected all of life, efforts to integrate it into existing social patterns show that there was popular reluctance to admit that normal life was being disrupted.

Throughout the epidemic, most of the community continued to be reluctant to interfere with business and industry. While it is true that all recreational facilities were closed for a month, it may well be that banning such peripheral economic activities was a gesture designed to pacify those who wanted drastic protective measures. There was never any serious consideration given to closing the industrial and commercial heart of the city.

The desire for profit continued unabated, and many businessmen incorporated the epidemic into their profit-making activities. Entrepreneurs turned their hand to the manufacture of influenza masks and veils.⁵⁹ Druggists raised prices of influenza drugs to excessive heights (camphor went from $40 \not e$ a pound to \$6.50 in one week), causing such public outrage that city council considered buying drugs and selling them to the public at cost.⁶⁰ Advertisers of all sorts used influenza as part of their sales pitch.⁶¹

⁵⁷ The Vancouver Daily Province, 6 November 1918, p. 17. "Form to be Filled in by Investigator," Mayor's Correspondence Influenza Epidemic, loc. cit.

⁵⁸ The Vancouver Daily Province, 13 December 1918, p. 28.

⁵⁹ The Vancouver Daily Province, 25 October 1918, p. 3; 2 November 1918, p. 4.

⁶⁰ Ibid., 22 October 1918, p. 3; 24 October 1918, p. 3, p. 8. The British Columbia Federationist, 24 January 1919, p. 4.

⁶¹ For example: "Waiting for streetcars — getting wet feet — riding for long distances in cold, damp, stuffy, unwholesome cars — These are among the most prolific causes of Spanish Grip. Now is the time to get a nice comfy and speedy Ford Car..."

The Vancouver Daily Province, 21 October 1918, p. 2. "Excellent wherever Extra Warmth is Needed. Perfection Oil Heaters are ideal for the sick room...." Ibid., 22 October 1918, p. 3. "There is no Disguising the fact that the Spanish Flu is hitting the trade of the town pretty hard. Even we notice it.... We, at last, find

The crisis of the epidemic did not overcome the normal antipathy between management and labour. Their disputes, although coloured by the epidemic situation, persisted even in services of vital importance to public health. In late October, the Civic Employees' Union, which included employees of the water works, hospital, Health Department, and cemetery, threatened to strike for increased pay. Their bargaining position was undoubtedly strengthened by the epidemic (for example, the Health Department had increased its staff only a few days earlier so that it could operate twenty-four hours a day), and they received a substantial portion of their requested pay increase. 62 The laundry employees were out on strike when the epidemic arrived, and continued out despite objections from the public. Laundry owners used the employees' refusal to return to work at a time when the sick required clean linen to damage the union cause with the public. The employees replied by publicizing their willingness to work unpaid in hospital laundries or in a union-designated laundry on work that carried a doctor's certificate. 63

For much of the epidemic period, most of the community retained its normal faith in medical opinion on medical issues. The leaders of the Victory Loan Drive sought medical opinion on the advisability of open-air gatherings, the school board appointed their medical members to the subcommittee empowered to decide on school closure, and a Diocesan official asked the Vancouver Medical Association to give its opinion on church closure during the epidemic. ⁶⁴ It was this faith in medical opinion that gave the office of city Medical Health Officer much of its authority.

For four years, Vancouver's citizens had been preoccupied with the Great War and with promoting the war effort. Even in the midst of another kind of crisis — the influenza — the war effort was still felt to be

ourselves in a position to give something like individual attention to our customers.... In times of worry, scare or flu The Famous [Cloak and Suit Company] is the House for you." *Ibid.*, 23 October 1918, p. 2.

⁶² The Vancouver Daily Province, 21 October 1918, p. 2; 29 October 1918, p. 3; 30 October 1918, p. 8; 2 November 1918, p. 24; 3 December 1918, p. 7; 7 December 1918, p. 16. City of Vancouver, Council Minutes, loc. cit., 19 November 1918; 6 December 1918.

⁶³ The British Columbia Federationist, 25 October 1918, p. 1. The Vancouver Daily Province, 18 October 1918, p. 15; 19 October 1918, p. 10, p. 19; 22 October 1918, p. 16; 28 October 1918, p. 20; 2 January 1919, p. 22. The laundry workers returned to work in early January without winning a closed shop, the chief point of contention.

⁶⁴ Ibid., 4 November 1918, p. 2. Vancouver Medical Association Minute Book, at the Vancouver Medical Association Library, 9 December 1918. Vancouver School Board Minutes, loc. cit., 15 October 1918.

paramount. To support patriotic causes, Vancouver's citizens flocked together, ignoring health warnings against crowds. Even in mid-October, when town closure was the controversial issue before the city council, school board and Health Department, several large parties of returned soldiers reached town "straight from the war fields of Europe" and large crowds turned out to give them a hero's welcome. The end of the month, with a ban on indoor public meetings in effect, various outdoor events scheduled as part of the Victory Loan Drive took place as planned. Thousands gathered to see Harry Gardiner, "the human fly," climb the outside of the Hotel Vancouver, and to attend a rally and torchlight parade. Doctors claimed these outdoor gatherings resulted in a noticeable increase in influenza cases, but their warning was only a slight deterrent to peace festivities. On 7 November the city went wild over false rumours of peace, and huge crowds celebrated in the streets from early hours of the morning on Armistice Day itself.

The illusion of normality was ultimately destroyed by the epidemic. Telephone service deteriorated, newspapers were smaller, offices were unheated or closed, and stores operated for shortened hours. Everyone had sick friends and relatives. There were long queues for prescription spirits. The streets were darkened with frequent funerals, and fresh flowers and burial plots were in short supply.⁶⁹

As the epidemic's real effect was perceived, fear became a strong force in the community. Although contemporary newspapers made few direct allusions to fear, 70 they did carry accounts of behaviour suggestive of its presence, and the number of such accounts increased with reported influenza morbidity. The immediacy of popular reaction is suggested by the drop in attendance at moving pictures within a few days of the outbreak of influenza in Vancouver. 71 As the daily number of reported cases

⁶⁵ The Vancouver Daily Province, 16 October 1918, p. 16.

⁶⁶ Ibid., 29 October 1918, p. 1.

⁶⁷ Ibid., 30 October 1918, p. 3.

⁶⁸ Ibid., 7 November 1918, p. 1; 11 November 1918, p. 12. The Vancouver Daily Sun, 3 November 1918, p. 16.

⁶⁹ Telephone Talk, VII (November 1918), p. 6. A letter from F. T. Underhill to Mayor Gale, 29 October 1918, in a folder entitled, Medical Health Officer 1918, in City of Vancouver, City Clerk's Correspondence (inward) in the Vancouver City Archives, RG 2 Series A-1. The Vancouver Daily Province, 21 October 1918, p. 2; 22 October 1918, p. 3, p. 16; 2 November 1918, p. 2, p. 4.

To Exceptions are The B.C. Veterans Weekly, 24 October 1918, p. 1. The Vancouver Daily Province, 17 October 1918, p. 6; 6 November 1918, p. 17.

⁷¹ Ibid., 10 October 1918, p. 4.

approached and passed 100, evidence of increasing apprehension appeared: streetcar passengers began to follow public health advice to open car windows, parents kept their children home from school, and even citizens whose economic interests were adversely affected readily complied with town closure regulations. On the other side of this coin: Soon after the first wave of the epidemic peaked, Acting Mayor Kirk complained that "people in Vancouver are not taking a serious enough view of the 'flu' epidemic." At the same time, churchgoers began to object to the ban on normal church services and arranged for outdoor services. Likewise, a number of tobacconists objected to the regulation requiring them to close at 6:00 p.m. on Saturdays. The subsequent epidemic waves affected fewer people, received less press coverage, and seem to have aroused less apprehension, but show a similar correlation of fear with morbidity.

We see therefore that there were two contrasting attitudes present in the community: desire to cling to normal patterns of behaviour and recognition of the abnormality of the epidemic situation, the latter often accompanied by fear. (It was quite possible for one person to express in behaviour both these attitudes at the same time — to keep children home from school but take them to a Victory Loan rally, for example.) However, as the epidemic took firm hold, recognition of abnormality became the dominant attitude, both because of the spreading epidemic itself and because of the changed behaviour which the epidemic demanded. The weakening of confidence in public health authorities during the epidemic was part of this increasing sense of crisis.

* * *

Vancouver's influenza epidemic made public health a matter of primary concern for both municipal politicians and members of the public, and so changed the politics of public health. The changes affected the power of the Medical Health Officer and the relations of the city government both with voluntary associations and with the provincial government. The provincial government intervened much more actively

⁷² Ibid., 16 October 1918, p. 5; 17 October 1918, p. 6; 19 October 1918, p. 3.

⁷³ Ibid., 1 November 1918, p. 17.

⁷⁴ Ibid., 2 November 1918, p. 12, p. 24. Mayor's Correspondence, Influenza Epidemic, loc. cit., letter from F. W. Crawford, President Vancouver Tobacco Company to Acting Mayor Kirk, 4 November 1918; letter from Joe Barlow, Mainland Cigar Store to Acting Mayor Kirk, 3 November 1918; letter from the Secretary to the Mayor to E. F. Jones, City Solicitor, 6 November 1918.

in municipal health affairs and fostered consultation among municipalities on influenza problems and on province-wide preventive measures. Voluntary and municipal relief services were integrated, and on a metropolitan rather than a municipal basis. Within city government, public health issues increased in relative importance. Financial constraints were not applied to influenza expenditures, and the Medical Health Officer, who was the municipal government's epidemiological specialist, became, for a time, the most important figure in municipal government. The normal tendency to rely on the civil servant expert was thus exaggerated. The public's sudden interest in public health initially reinforced the politician's tendency to give priority to influenza matters and power to the Medical Health Officer. However, as the epidemic spread unchecked and diversity of medical opinion became evident, the public's faith in medical science weakened. Letters to the press and to politicians criticized both existing public health policy and the medical men and politicians responsible for it.75 The result was a weakening of the authority of the Medical Health Officer. When Health Committee members argued for immediate and complete closure of the city, the Medical Health Officer's power was challenged within the government. When schools closed in response to public pressure, grass-roots discontent briefly took initiative for public health policy from his hands.

The changes which the epidemic induced in the politics of public health lasted only briefly. The long-term trends toward bureaucratization, specialization, and centralization quickly resumed, leaving the temporary reversals or accelerations of the epidemic period behind. Despite medical experts' helplessness before influenza, dependency on medical expertise continued to grow. Despite increased regional co-operation over influenza services, nearly two decades were to pass before creation of the Metropolitan Health Board.

Indeed, the epidemic experience as a whole was remarkably ephemeral. Those who were ill recovered in a matter of weeks or at most months.⁷⁶ Although the financial distress and family disruption which often accom-

⁷⁵ Mayor's Correspondence, Influenza Epidemic, loc. cit., letter to Mayor Gale from "Citizen," 29 October 1918. The Vancouver Daily Province, 29 October 1918, p. 6; 15 January 1919, p. 22; 23 October 1918, p. 16; 2 November 1918, p. 12. The letter in the last reference speaks of "dissension or cowardice of health officials, the ignorance of civic authorities, the deliberate recklessness of political leaders..."

⁷⁶ British Columbia Telephone Company, Minute Books of the Employees' Benefit Plan Committee, vol. I, 22 November 1918, 10 January 1919, 26 March 1919, 8 May 1919, 10 June 1919 gives evidence of telephone operators who were away from work for a number of months.

panied death continued to affect the community for some years, they tended to be forgotten outside the affected families. The community had been reluctant to change in the face of crisis, and re-establishing long-term patterns of development in public health administration was a natural part of the return to normality it desired. With spring, the epidemic experience melted into the general adjustment to peace, its social effects inconspicuous among similar ones produced by the longer ordeal of war.