Containing and Preventing Contagious Disease: Montreal's Protestant School Board and Tuberculosis, 1900-1947

MARY ANNE POUTANEN

Abstract. In this period, Montreal was the most unhealthy city in Canada owing to widespread poverty, abysmal living conditions, inadequate public health, and a dependence upon private charities to provide health and welfare services. While Montreal's Protestant school board assumed a pivotal role in the war on tuberculosis by early identification of consumptive pupils, educating those in treatment, and prevention, these initiatives were tempered by a conservative view that equated poverty with moral degeneration. School board minutes provide a window onto commissioners' construction of health, the nature of the relationship between a school and its community, and the factors which influenced their decisions.

Résumé. A cette epoque-là, Montréal était la ville la plus insalubre au Canada en raison notamment d'une grande pauvreté, de conditions de vie tout à fait épouvantables, d'un système de santé publique mal adapté à la réalité auxquels il fallait ajouter une dépendance aux oeuvres de bienfaisance privées qui fournissaient des services de santé et d'aide sociale. La commission scolaire protestante de Montréal jouait un rôle essentiel dans la guerre contre la tuberculose en identifiant le plus tôt possible les élèves tuberculeux, en éduquant ceux en traitment et en mettant l'accent sur la prévention. Cependant ces initiatives étaient freinées par le conservatisme des commissaires qui mettaient la pauvreté sur le même pied que la dégénérescence morale. Les procès verbaux de la commission scolaire offrent un aperçu de l'interprétation de la santé par les commissaires, de la nature des relations entre l'école et la communauté et des facteurs qui influençaient leurs décisions.

Mary Anne Poutanen, Research Associate, McGill University.

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INTRODUCTION

In autumn 1917, seven-year-old Frederick Lear accompanied his mother to the Royal Edward Institute where Dr. E. S. Harding confirmed his diagnosis of pulmonary tuberculosis. Presumably, Frederick's teacher had brought his suspected condition to the attention of the doctor and nurse who routinely performed medical checkups at his school. Health and school authorities responded quickly to Frederick's diagnosis. To treat the disease, prevent its spread, and allow the young scholar to continue his studies, Frederick left his Grade 1 class to attend, free-of-charge, the "open-air" school at the Royal Edward Institute. An endowment by Jeffrey Hale Burland, a founder and one-time president of the Royal Edward Institute,[1] had permitted the board of directors to establish the first open-air school in Quebec in 1912 and provide it with the services of a physician and nurse; the Ladies' Committee furnished school equipment, food, and clothing. The city's Protestant Board of School Commissioners supplied its teacher and paid her salary.

Subsidizing the open-air school or Jeffrey Burland School as it came to be called was one of a number of initiatives taken by the school board to contain and prevent tuberculosis. The experience of Frederick Lear and his family, which he so carefully inscribed in a letter to hospital officials,[2] provides a compelling example of how the school commissioners responded to one of their pupil's diagnosis of tuberculosis and offers a window onto the complicated interplay between a medical facility, school board, and a municipal department of health.

I argue that Montreal's Protestant Board of School Commissioners assumed a pivotal role in the war against the "white plague" by building more salubrious schools, promoting public health education, instituting systematic medical inspections in their schools (which encouraged early detection of tuberculosis), as well as physical training, hiring school nurses, and educating consumptive children. These initiatives, however, were tempered by the commissioners' conservative view that equated poverty with moral degeneration.[3] Thus, they blamed parental ignorance and negligence for the spread of tuberculosis. While tuberculosis has been the subject of a number of studies both in Canada and elsewhere, children have not figured very largely in most of these monographs.[4] Historians recognize the significant role that school boards played in improving the health of the nation's children but how this happened has received less attention.[5] Consequently, school boards are inadvertently accorded passive characteristics rather than presented as agents of change. Even though annual reports allow scholars to identify school commissioners' interventions in matters of public health, other documents, minutes in particular, offer insights into their construction of health, the nature of the relationship between a school and its commu-

nity, their willingness or reluctance to implement the recommendations of medical authorities, social reform organizations, and charities, and the factors which influenced their decisions. Thus, the minutes of the Protestant school board in Montreal are central to this study. Annual reports and minutes of various institutions, the municipal Department of Health, and anti-tuberculosis groups, patient records of health-care facilities, the report of the 1909-10 provincial Royal Commission on Tuberculosis, newspapers, photographs, pamphlets that were distributed to children, and material artifacts of health exhibitions were also consulted.

This study is part of a SSHRC-funded investigation, "Design and Practice": Tuberculosis in Montreal, 1880-2002" at McGill University. Situated at the Montreal Chest Institute, formerly the Royal Edward Institute, the interdisciplinary team, led by Annmarie Adams, includes students and scholars of architecture, geography, urban planning, history, and medicine. It is also linked to the work of the Quebec Protestant Education Research Project and a co-authored monograph, *A Meeting of the People: School Boards and Protestant Communities in Quebec, 1801-1998*.[6] The article begins with the turn-of-the-century child welfare movement, which championed children's health and ends with the discovery of streptomycin, a revolutionary breakthrough in the treatment of tuberculosis.

The discussion has been organized as follows. It starts with a brief look at the living conditions of working-class Montreal and the epidemiology of childhood tuberculosis and then shows how organizations, concerned about child welfare, embraced the campaign to stop tuberculosis. Next, the initiatives taken by the Protestant school board to contain and prevent tuberculosis and the relationship of these interventions to city social agencies and community organizations will be explored.

TUBERCULOSIS IN THE CITY

In 1900, Montreal was the most unhealthy city in Canada. Herbert Ames' well-known sociological study of Montreal, *The City Below the Hill*, revealed that the working class inhabited wards which were overcrowded, polluted, and a mix of tenements, smoky factories, dirty, dusty unpaved streets, and abysmal sanitation. Inner-city industrial workers and their families sometimes dwelled in homes situated on narrow lanes, courts, or in rear buildings, without adequate green space. Over half of the households still depended upon an outdoor privy.[7] Many lived within walking distance of the factories along the Lachine Canal in Griffintown and Pointe-St-Charles; others dwelled on streets bordering Boulevard St-Laurent where Jewish immigrants sweated in the clothing trade; in Maisonneuve, the "Pittsburgh of the North;" and near the Angus Yards in Rosemont home to the city's burgeoning Italian population. In these districts, communities linked together by kinship, reli-

gion, and ethnicity commingled. By contrast, an English-speaking economic elite, which controlled much of the Canadian economy and had unprecedented influence on all levels of government, lived on the slopes of Mount Royal. The Golden Square Mile as it came to be known had been established above the smoke, pandemonium, and effluvium of the factories owned by the Anglo-Protestant bourgeoisie and the homes of the working class who laboured in them. It was more than a geographic division but an enormous social chasm between the men, women, and children below the hill and those who lived higher up. Although English-speaking Montrealers represented a quarter of the city's population, this privileged elite made up only a fraction. With its wealth, Montreal's Anglophone bourgeoisie created, supported, and managed an array of English-language health facilities and social services to which Anglophone skilled and unskilled workers had access.

The working-class wards located below Mount Royal were characterized by high infant mortality rates—the result of untreated water[8] and unpasteurized milk[9]—and similarly high levels of tuberculosis owing to poverty and living in too close proximity. The death rate was double the average and in certain wards equalled the birth rate. Ames drew a link between poverty, poor living conditions, and high mortality rates.[10] Even though Robert Koch had already established in 1882 that tuberculosis was an infectious disease, historian Terry Copp contends that Montreal's inadequate public health services and its dependence upon private initiatives meant that the incidence of diseases such as tuberculosis (the highest in North America) took longer to control. In 1906, tuberculosis caused more deaths than all other contagious diseases combined and second only to infant diarrhea.[11]

Frederick Lear was one of a myriad of children who suffered from the "white plague." The city had an appalling rate of tuberculosis among children; at the turn of the century, mortality rates from the disease accounted for 135.1/1000 deaths of children between 5 and14 years of age and for those above the age of 14, the number of deaths increased more than threefold (446.2/1000 deaths of ages 15 to 24).[12] Nonetheless, these statistics underrepresented the problem. For instance, many of the children dying from pneumonia, meningitis, peritonitis, or sequelae of childhood diseases such as measles and whooping cough may have had tuberculosis. Public health workers had been slow to recognize how widespread childhood consumption was since the disease was more likely to affect joints, bones, and glands than the lungs.[13] Non-pulmonary tuberculosis was often transmitted to children in milk and meat that had been infected with bovine tuberculosis.

By the turn of the 20th century, urban reformers took renewed interest in child protection resulting in the construction of children's hospitals; campaigns for clean water, pasteurized milk, compulsory immu-

nization, and routine medical and dental examinations at school, the establishment of fresh-air camps for inner-city children, and in the employment of public health nurses who visited the homes of the working poor to promote children's health. William Osler's famous maxim that tuberculosis was "a social disease with a medical aspect" embodied the view of social reformers in this period.[14] Since Montreal charities were divided according to religious and ethnic affiliation, Protestant, English Catholic, French Catholic, and Jewish communities provided health and social services to their own constituencies and in public schools operated by Catholic or Protestant boards. Similarly, many of the women's organizations which developed public health initiatives aimed at children—Montreal's Local Council of Women,[15] YWCA, WCTU, and IODE—were products of the Anglo-Protestant community and were especially active in Protestant schools. Women reformers defined themselves as wives, mothers, and because of their proclaimed moral superiority and their commitment to the sanctity of the family, as defenders of the hearth. Such maternalism was central to the thinking of first-wave feminists. While these organizations recognized that wretched housing, malnourishment, and inadequate sanitation, the outcome of industrialization and urbanization, resulted in children's deplorable health status, eugenic theories underpinned much of the rhetoric. Consequently, elite women believed that by "enlightening" parents (mothers in particular) through education, child health would improve.

The limitations of their efforts lay exposed in the aftermath of World War I. The war had refocused attention on children's health because substantial numbers of working-class men were rejected from combat on the basis of chronic poor health. At this decisive moment in history, urban reformers acknowledged that healthy children made ideal citizens and were a nation's asset. In response, Montreal's health department established a separate division of child hygiene in 1918. Historian Cynthia Comacchio contends that child experts, particularly physicians, commandeered the nascent child welfare movement by reshaping it based on medical notions of child-rearing techniques and of children's health, and urging the different levels of government to take responsibility for child welfare.[16] Reformers also wanted, as Kari Dehli suggests, to produce a nation which accommodated changing relations of production, citizenship, and war.[17] Both Canada and by extension, the British Empire, required healthy men to serve as soldiers should the call to war be raised again.

In Montreal, public health crusaders and medical authorities believed that it was the responsibility of the Quebec Board of Health to improve the city's dismal public health record by forcing municipalities to institute preventive measures to control disease. That the provincial government refused to finance public health programs, leaving it to cities—

usually private charities and other organizations—to raise the necessary funds to enact such programs[18] was problematic. This was especially obvious in the case of tuberculosis. Its high mortality rates, lack of a cure, and the recommendations of the 1909-10 Royal Commission on Tuberculosis—which had much to say about childhood consumption[19]—did not budge the provincial and municipal governments. Nor did the bacteriological approach to tuberculosis which came to dominate the interwar years, a consequence of the growing use of x-rays to identify incipient tuberculosis-sufferers as well as surgical "collapse therapy" (pneumothorax and thoracoplasty).[20] This shifting perception of the disease had turned Osler's view on its head: tuberculosis had become a "medical disease with a social aspect."[21] The state balked at spending large sums of money to build a network of badly needed clinics, preventoria, and sanatoria[22] or even to ensure that Montreal's milk supply was safe.

PROTESTANT SCHOOL BOARDS AND THE FIGHT TO CONTAIN AND PREVENT TUBERCULOSIS

Given these mammoth public health problems, school commissioners had much work to do. The school board served the largest English-speaking Protestant population in the province[23] in addition to most Jewish and Greek Orthodox children. It also managed a network of Protestant schools across the city, each operating in specific districts or wards, which catered to children of all social classes. Middle-class students dwelled in the wealthy district of the Square Mile and frequented the prestigious High School of Montreal, or lived in newly established white-collar districts such as Notre-Dame-de-Grace. Working-class students came from poor, inner-city families of which a significant number were recent immigrants. They inhabited different parts of Montreal, Boulevard St-Laurent and Pointe-St-Charles are but two examples, where they attended local schools.

While its creation in 1846 as an appointed rather than elected body[24] might have made its potential for reform doubtful, the Protestant school commission resembled boards that administered most urban charities and social welfare agencies. Since the municipal government, whose job it was to select the six commissioners who would sit on the Protestant Board of School Commissioners, routinely chose three aldermen, there was a close association between the contemporary issues that preoccupied city hall and those of the school board. The three other appointees were usually clergymen who often sat on the boards of city charities. Hence, there was a similarly close link between the school and public health initiatives.[25]

The school board had already grappled with serious public health issues in the previous century. It customarily instituted measures to con-

tain epidemics of diseases such as measles, diphtheria, and smallpox, as well as colds and flu, all of which wrought havoc with school attendance. Commissioners responded by closing schools when necessary, fumigating buildings, and promoting, but not enforcing, student and staff health through immunization. By the first decades of the 20th century, minutes reveal their growing alarm over the number of tuberculosis cases in the city. In response to the war on tuberculosis, (using the military metaphor so common in the period) the Protestant Board of School Commissioners battled the disease on three fronts: early identification of consumptive pupils, educating those in treatment, and prevention.

IDENTIFYING TUBERCULAR STUDENTS

The introduction of routine medical examinations of school-age children was pivotal in locating those afflicted with or at risk of developing tuberculosis. Organizations such as the Local Council of Women and the Woman's Club had been advocating just such an intervention. In 1904, for example, a deputation from the Woman's Club met with Protestant commissioners to request that a system of medical examinations of school children be instituted "to test their sight and hearing, and for the detection of latent physical defects or symptoms of disease" and then to refer such students to their family physician. The Medico-Chirurgical Society of Montreal was prepared to do this work free of charge.[26] Although interested in the offer, school commissioners were always pragmatic when it came to the business of operating a school board and refused to make a decision until they had heard from the city's health authorities. In September 1906, representatives of the Catholic and Protestant school boards and the Woman's Club met with members of the city's health committee to organize medical school inspections for which the health department would be responsible.[27] Questions around what was an adequate medical examination, how often one was needed, what would be the expected results, how many inspectors would be required to provide these services to Montreal's 155 schools, and at what salary had still to be settled.[28] The first municipality in Canada to implement school medical examinations, the health department appointed 45 part-time inspectors to check nearly 50,000 school children once a year (by 1915 it increased to twice a year), to ascertain the sanitary conditions of schools, and to visit every school once a day to advise the principal about any children whose health was suspect.[29]

The school board clearly favoured this highly visible public health intervention, reassured that provincial and municipal health departments were taking responsibility for children's health. Yet the board was openly critical of the policy's mixed results once it was put into practice. First, school medical inspectors sent their reports directly to the health

department bypassing the school board entirely. Commissioners wanted to receive any reports wherein the inspectors uncovered problems related to either the hygiene of schoolhouses or to the health status of students. The board also proposed that inspectors report directly to the schools' principals each time that they visited.[30] Second, once an inspector deemed a child a public health risk and ordered him or her home, his responsibility ended. The school board felt very strongly that collecting statistics about the health of students had little significance "except to demonstrate the need for more inspection and education, and possibly for compulsory, or at least free treatment in many cases,"[31] as did a procedure that offered no remedy. It also understood that for a system of health inspections to be effective, a good relationship between a municipal health department and a school board was key. Yet, the school commissioners' dealings with the city's health department proved to be a continual source of frustration. Equally, the health department threatened to prosecute school boards which refused to rectify problems identified by the inspectors.[32]

In response to these tensions, the school board hired two nurses of the Victorian Order to work alongside the medical inspectors in eight of its schools, presumably located in inner-city neighbourhoods where tuberculosis was rampant. The Woman's Club had recommended their employment "pour enseigner aux pauvres mères, surtout elles d'origine étrangère que mieux vaut prévenir la maladie que la guerir."[33] Nurses made home visits to encourage mothers' compliance in matters of cleanliness, medical and dental treatment, and quarantine of children with communicable diseases, to ascertain a household's social and economic circumstances, and to promote the idea that health was an obligation of citizenship.[34] Not only did these home visits represent an intrusion into the private lives of the city's working class, but as historian Ellen Ross argues, school and health authorities instituted medical inspections as much for mothers as for children. Perceived as the means to both assess mothering and to reconfigure health practices at home, school medical examinations also entailed additional work for women already burdened with a long work day. Aware that the inspectors' gaze included an assessment of their maternal skills, mothers made certain that their children were scrubbed and dressed in their finest clothes before undergoing medical checkups at school. When the inspectors would almost certainly discover "defects," women were further saddled with the daunting task of searching for affordable medical treatment for their children or furnishing the care themselves.[35]

Two years later, the municipal health department revised its inspection procedure. Although high schools were now included, it had divided the city into 12 districts and assigned an inspector who would be responsible for all sanitary matters in his district. The change proved to

be a herculean task for the 17 inspectors[36] and two full-time public health nurses who were responsible for the now 60,000 pupils attending public schools.[37] The immediate effect was that school visits became uncertain and irregular and that there was no guarantee that the inspector would be English-speaking.[38] Dissatisfied, the school board looked elsewhere to find a better model of health inspections. It sent Commissioners Yates and Silver to New York to investigate its method of medical inspections which had been designed by both school and health authorities[39] and considered better suited to Montreal than the one being practised. Just how this information would improve the situation is unclear since having aldermen on the school board did not ensure constructive relations with city hall nor loosen its purse strings in matters of health.

Some of the school board's frustrations were alleviated by the Royal Edward Institute. "The dispensary fosters relationships with School authorities. It can render help, both to the schools by removing from them infected children brought under its notice, and to the infected children themselves, by removing them from conditions of school life which are harmful to them."[40] Notwithstanding the critical service that its physicians provided to consumptive children, their assistance served other purposes as Mona Gleason's study of medical inspections in British Columbia in the same period shows: "by organizing, inspecting, diagnosing, categorizing, and segregating "diseased" children, medical inspection disciplined the student body, reassured observers, and legitimized medical expertise."[41] The school commissioners were indeed relieved as witnessed by a circular letter which they sent to principals and teachers underscoring the importance of asking for special medical examinations in any cases they suspect of tuberculosis.[42] This was likely the sequence of events which brought little Frederick Lear to the attention of the medical inspector at Riverside School. The school board went further. Cognizant of the advancements made in Toronto regarding school inspection, commissioners requested that the Montreal Anti-Tuberculosis and General Health League survey all pupils attending their schools and recommend what steps the board might take to improve the existing school inspections.

Equally, the municipal health department, frustrated with the modest impact of inspections on ameliorating children's health, sought to improve its relationship with the city's Protestant and Catholic school boards. It proposed that all parties enter into a written agreement to promote better cooperation.[43] Aware of the long-standing tensions between the city school boards and the health department over the implementation of suitable medical inspection, the 1928 Montreal Health Survey lamented the program's deficiencies. Thirty-eight nurses were responsible for the 126,000 pupils who attended the city's 255 schools. Such a meager cadre of nurses, it asserted, resulted in fewer home visits.

Moreover, school officials provided inadequate facilities in which to carry out medical inspections: many had no proper health room and only 12% (30) had weight scales.[44] Nearly a decade had passed since the municipal Department of Health first urged school boards to construct health rooms in all of their schools. Health authorities recommended that each room be large enough to conduct proper vision tests (20 feet in length), and equipped with a table or desk, chairs, filing cabinet, weight scale, medication cabinet, vision chart, paper, pens, and ink.[45]

The Protestant school board made space in schools where little was available. Although it is unclear from the minutes where these check-ups took place before formal medical rooms were built or of what medical inspections consisted, Protestant boards elsewhere furnished makeshift examination rooms fashioned out of lunch rooms, libraries, auditoriums, and classrooms. This was the case in at least one Montreal school. The principal of Mount Royal School informed the board that the medical inspector had refused to continue his work at the school until he was provided a heated room.[46] Photographs of Montreal school children undergoing inspections suggests that cursory examinations were made in improvised spaces, usually classrooms. By the end of World War I, architects began to incorporate medical rooms into the architectural plans of new school buildings, renovations, and extensions. In 1919, for example, the school board asked architects, who designed the Devonshire School to relieve overcrowding in Mount Royal, Aberdeen, and Strathearn schools, as well as an extension to Lorne School, to include medical rooms.[47] Such health facilities would have had some urgency considering that impoverished Jewish children who lived in the garment district along the Main (made famous by Mordecai Richler's novels) would quickly fill Devonshire School and working-class children frequented Lorne School in Pointe-St-Charles. By the Depression, 35 Protestant schools featured medical rooms.

As other health-care specialists participated in medical school inspection and as new diagnostic tools came into use, checkups became more substantive. However, the Protestant board and the municipal Department of Health still depended upon outside agencies to launch innovative anti-tuberculosis programs. The Child Welfare Association was, according to the *Montreal Star*, bent on "waging mobile war on the White Plague" by administering tuberculin tests and chest x-rays to all city school children. Its goal was to identify those with incipient or non-symptomatic tuberculosis since early treatment would result in a better outcome.[48] To ensure that teachers were also free of tuberculosis, the school board insisted that teachers undergo their own health examination and chest x-ray. By 1940, commissioners expanded mandatory chest x-rays to all its employees,[49] a month before the government amended the Education Act legislating compulsory, yearly medical examinations and chest x-ray for all Quebec teachers.

The school board in collaboration with the health department and community organizations provided health examinations free of charge to their school populations from school entry to leaving. The lack of resources available to child tuberculosis sufferers was an enormous obstacle to treatment. Parents without the financial means to hospitalize their consumptive children had few available options as we shall see.

EDUCATING TUBERCULAR CHILDREN

In some ways, young Frederick Lear was a lucky consumptive. He attended the open-air school during the day and returned home in late afternoon. His father, Frederick Senior, who had enlisted at the outbreak of World War I, was in Europe; his mother, Edith, with younger children at home to care for, could not accompany him to the school. For two years a complicated travel itinerary meant that Frederick left his family's flat on Magdalen Street in the working-class ward of Pointe-St-Charles, rode the Wellington streetcar to Place d'armes, transferred to the Guy Beaver Hall car, got off at Belmont Street, and walked the rest of the way to school. Each afternoon he returned home by streetcar where he ate his supper using separate dishes and cutlery, and isolated from the rest of the family; he deposited his sputum in special containers provided by the school. Although he was quasi-quarantined from friends and siblings, his medical condition did not preclude travelling on public transportation with a cuspidor to and from the "consumptive" school each day.

The medical landscape was desolate for Montreal's adult tuberculosis sufferers but worse still for children.[50] Consumptives were admitted to the Grace Dart Home Hospital which opened in 1922, the Hôpital des Incurables, operated by the Soeurs de la Providence and treating mostly Catholics, the Hôpital du Sacré-Coeur which replaced it following a fire in 1923, the Jewish Home for Incurables (later the Hospital of Hope), and St-Joseph's Sanatorium in Rosemont which was built in the 1930s. The demands upon scarce health-care resources meant that family members were sometimes treated in different facilities as the experience of Mary shows. In 1939, she was admitted to the Hôpital du Sacré-Coeur with pulmonary tuberculosis; her 12-year-old sister, a student at the Aberdeen School, was sent to the Royal Edward Institute where doctors determined that she was disease-free. Six years later, she fell ill to the same disease which had claimed Mary.[51] Children with tuberculosis of the joints and bones were admitted to the Children's Memorial Hospital. By 1937, it became the first health facility of its kind in Quebec to admit children with pulmonary tuberculosis. It was here that a 15-year-old student of the Baron Byng High School was treated. Two years later, when his tuberculosis showed signs of re-activity, he was transferred to the Royal Edward Institute which now admitted adolescent patients.[52]

Montrealers were also hospitalized in Ste-Agathe-des-monts at the Laurentian Sanatorium which opened in 1908, and at the Mount Sinai Sanatorium, the first Jewish hospital of its kind in Canada, which was established a year later. Families, who could afford the cost of American facilities, took their children to the nearby Trudeau clinic at Saranac Lake in New York state; Jewish families travelled to Denver to seek treatment for their offspring at Jewish facilities established there.

Treatment was both lengthy and costly. Before chemotherapy, it consisted of bed rest, good nutrition, fresh air, sunlight or heliotherapy, and health teaching. Surgical procedures such as artificial pneumothorax[53] and thoracoplasty,[54] reduced the hospital stay. Montreal physicians, critical of the provincial government's reluctance to finance much needed sanatoria beds, lobbied for larger facilities. The frustration in not being able to treat more consumptive children was expressed by the Royal Edward Institute's director, E. S. Harding: "We are taking the children into the Institute, giving them the advantage of fresh air, rest, and nourishing food in our Open Air school. All this means a vast amount of labour at a heavy cost, and yet it amounts to so little compared with the magnitude of the problem, that the results are scarcely appreciable."[55]

Sanatoria were beyond the reach of most urban poor. The Mount Sinai Sanatorium was the only institution to provide free care to tuberculosis sufferers whose family members could demonstrate that they did not have the means to pay the weekly charge or even a portion of it. Between 1918 and 1947, 93 school children,[56] largely Jewish, were treated there; all came from Montreal and almost all of them would have attended Protestant schools. The vast majority of poor parents brought their children to the Institut Bruchési, Herzl Dispensary, and Royal Edward Institute. A three-story building with a glassed-in verandah, sunrooms, and a large roof garden, which served as a day camp,[57] children could spent the day at the Royal Edward Institute receiving fresh-air treatment and nutritious meals. During the depression, the Ladies' Committee established a milk bar for children waiting to see a doctor or nurse. Dispensary and community nurses supervised their treatment at home and anti-tuberculosis associations printed and distributed pamphlets about home care of the consumptive. Alternatively, children could be placed in foster care under the Grancher system. Developed in France and conveyed to Montreal in 1929, the provincial Department of Health paid $10 a month for each child to cover board and lodging, supplied clothing, and paid school fees. Local public health nurses, physicians, and clergy supervised these transplanted urban children.[58] The state's willingness to take children from their families to prevent infection from the tubercle bacillus but not to spend money to improve working and living conditions of its working-class constituency was at the heart of a discourse that blamed consumptives for becoming ill in the first place.

Little Frederick Lear convalesced for three months at the Flanders' farm in Waterville after spending nearly two years at the open-air school and before returning to his regular classroom at Riverside School.

The Protestant school board provided educational services to only a limited number of children. Those with tuberculosis of the joints and bones who were patients at the Children's Memorial Hospital or who attended the School for Crippled Children, and children between the ages of 5 and 15 with pulmonary tuberculosis who frequented the open-air school at the Royal Edward Institute, received schooling. School commissioners were involved in the open-air school from its inception in 1912. Modelled after similar schools in New York and Chicago,[59] doctors recommended only school-age children with the best prognosis. One such student was Russian-born Fanny S who transferred to the open-air school from the Mount Sinai Sanatorium where she had received treatment for bilateral pulmonary tuberculosis. Fanny had arrived in Canada already infected.[60]

To meet growing public pressure to accommodate more students, the school moved three times. When it opened in 1912, 20 children attended classes on a gallery of the building before moving to a separate building at the rear of the property in 1915. It was here that Frederick Lear went to school. He sat in an unheated classroom with its windows open, wearing outdoor clothing. When the weather was too cold for pupils to hold pencils, Frederick and his classmates played games and read stories.[61] In 1926, a larger school, the Jeffrey H. Burland School, was inaugurated by his widow to accommodate 50 children and two teachers. In 1931, the Royal Edward Institute moved to its St-Urbain Street site. The school, also referred to as the "open-window" school, was established in a separate building but connected to the dispensary through a basement tunnel. Its two floors included a kitchen, classrooms, and dormitories.

School commissioners chose Margaret Hadrill as the school's first teacher. After accepting the position, Jeffrey Burland sent her to New York to study and implement the same routine and diet that had been established at open-air schools there. Hadrill followed a strict program that reflected what historian Katherine Ott refers to as the trinity of care[62] (fresh air, sunlight, good diet, and rest). Children attended open-air classes in the morning, ate a hot meal at noon, and took a nap in the afternoon. Once a week, a nurse weighed the pupils and a doctor examined their glands, chest expansion, and haemoglobin. Most pupils attending the open-air school improved and returned to regular classes. Between 1912 and 1929, 87% of the 500 children who had attended the school were discharged as cured.[63] They gained weight, became more attentive and energetic, and followed the school curriculum which made the transition to public school easier. The resultant excellent report cards were largely a testament to the small teacher-pupil ratio as well as the

added benefits of fresh-air, rest, and nutritious food. The tenets of healthy living practised at the school, but denied to pupils at home by virtue of their parents' pay cheques, made a case for better wages and housing as the solution to fighting the white plague rather than simply educating children and parents to ameliorate ignorance and neglect.

Although subsidized by both confessional school boards, the school operated at a loss. It was costly because, unlike regular school, children attended free-of-charge and throughout the year including Christmas and Easter holidays and in the summer when they went to camp in the Laurentian mountains. That school commissioners did not equip the classroom even though it did so in all of its other schools, suggests that the school board had not only deferred to the institute's medical experts but were quite willing, given its tight-fisted conservatism, to allow the Ladies Committee to assume these costs. Ironically, these volunteers turned to pupils attending Protestant schools to solicit donations for the school. For example, Strathearn School students from predominately working-class, immigrant families donated new clothes and sweaters. Those attending the prestigious High School for Girls contributed $17 and the Westmount High School raised $217.60 from the proceeds of a concert given by its graduating class. Even Margaret Hadrill and her family presented money and goods to the Ladies Committee[64] long after she left the school after contracting tuberculosis.

These acts fostered citizenship by encouraging a sense of belonging among children of immigrant families who were repeatedly exposed to a Protestant view at school that emphasized loyalty to empire and nation in songs, stories, drills, and the celebration of Empire Day. This patriotic groundwork would serve the English-speaking community well when it came to mobilizing students, who attended Protestant schools, for the war effort associated with both world wars. This was clearly the case for Jewish children attending Protestant schools during World War II.[65] These charitable activities also prepared children for their future roles in service clubs and community organizations, while instilling middle-class values, and reinforced the idea that campaigns of reform required the leadership of medical experts. The same was true for the Children's Memorial Hospital and the School for Crippled Children. Both the hospital and school had been built by large amounts of money raised "by the children, for children less fortunate than they."[66] In 1903 for example, Montreal school children held a bake sale that raised nearly $450 toward renovations of a temporary hospital on Guy Street. Almost half of the patients at the hospital had tuberculosis. A year later, a bazaar at the High School of Montreal garnered over $6000 toward the purchase of land for a permanent site on Cedar Avenue.[67]

The Children's Memorial Hospital comprised a number of buildings and cottages: the School for Crippled Children and out-patient services

were situated along Cedar Avenue; the administration building, operating rooms, and cottages which accommodated patients were set back from the street.[68] The large verandahs around the cottages and access to roofs meant that children were rolled out on beds to undergo fresh air treatment. Children with tuberculosis of the spine, bones, and joints underwent the same therapy as those with pulmonary tuberculosis: rest, fresh air, nutritious food, and sunlight. Since the average hospital stay was more than two months, children received a few hours of schooling from teacher Sarah Tyndale on the ward each day. She was ideally suited to her job. Not only did she teach useful commercial subjects, typing and shorthand, but she understood the long-term educational requirements of her pupils.

It was Tyndale who first proposed to the hospital's board of management the need for a permanent School for Crippled Children, frequented by children who were in-patients at the hospital and by those living in the community who were left with the debilitating effects of diseases such as tuberculosis. The board took her suggestion to the Protestant school commissioners and a committee was struck. Once again, Protestant school students organized; even rural schools got on board. Together they raised $32,000. Six years later, the school opened under Tyndale's principalship.[69] Although it was administered by the hospital, two of the four teachers who worked at the school were funded by the Protestant school board to teach Protestant and Jewish children; the Catholic School Commission appointed two teachers for Francophone and Anglophone Catholic patients. Within a year, 97 children attended the school. Motor ambulances transported most of the children attending the school, free of charge, and brought them home at the end of the day. To raise money for additional vehicles, Tyndale sold service flags with the motto, "When you Buy a Flag at a Dollar You're Helping to Make a New Scholar."[70] For those patients who could not attend the school, a teacher continued to give them daily lessons in the wards.

Similar to the "open-air school," the School for Crippled Children used the same curriculum taught in Protestant schools with the addition of commercial courses and piano lessons, and provided daily hot meals and monthly medical examinations. Teachers also sought to instill middle-class values of cleanliness and citizenship: "To inculcate a love of truth—to awaken in the children a sense of duty and responsibility to their neighbours and themselves—to impress upon them that personal cleanliness, both of mind and body is an essential to happiness,—in short, so to influence the child that he may become a worthy Canadian, a good citizen and an upright character—these are the aims and endeavours of the teachers of your school."[71] Like the open-air school at the Royal Edward Institute, Tyndale established a summer camp for convalescent patients and pupils of the school on her Laurentian property in Ste-Sophie.[72]

Teachers Hadrill and Tyndale taught only a small proportion of school-aged children suffering from tuberculosis. For those from families which could not afford hospital care, no other remedy existed. A lack of beds and the formidable cost of hospital care for most families with consumptive children echoed similar complaints from tuberculosis specialists. Isolating tuberculosis sufferers had reduced substantially the spread of the disease; prevention, the subject of the next section, through public health teaching became a rallying cry of community organizations and health experts. Keeping children tuberculosis-free was more effective than simply treating it.

Protestant school commissioners understood that a successful program of tuberculosis prevention had to confront the dual nature of schools: as sites that spread disease and as places to learn about disease. Prevention meant that schoolhouse hygiene[73] ensured that buildings were well ventilated, sunny, and spacious, and that children were duly educated about tuberculosis. While hygiene lectures were designed for all students attending Protestant schools, they often targeted children from immigrant families and of alcoholic parents, and tobacco-smoking school boys to counteract family influences at odds with those of reformers and medical authorities, and with the tenets of citizenship.

MAKING PROTESTANT SCHOOLS HEALTHY SPACES

Public health reformers and medical experts criticized the state of Montreal's public schools and linked the unhealthy physical environment in schools—specifically poor ventilation, inefficient heating, lack of sunlight, and overcrowding—to tuberculosis. Public health expert Severine Lachapelle had recommended in 1891 that childhood consumption could be prevented if schools were built on quiet sites away from public buildings, factories, and railway stations, classrooms were designed with floor spaces at a ratio of 12 to 15 feet of space for each pupil, and schools were outfitted with chairs and desks that permitted students' optimal lung expansion.[74] In 1903, the Legislation Committee of the Montreal League for the Prevention of Tuberculosis, issued a report urging school authorities to build public schools that were of a fixed size, ventilated, with optimum sun exposure, and to prohibit dry sweeping.[75] Some of these same medical experts sat on or served as witnesses at the Royal Commission on Tuberculosis, only to reiterate the need for healthier schools: "the school with its promiscuousness, its dusty, foul and infectious atmosphere combined with sedentariness and overwork, constitutes a powerful cause of impoverishment of the system in children, and is a predisposing cause of tuberculosis."[76] The 1909 Quebec Public Health Act designated the hygienic standards that school boards had to meet in all of their new educational facilities and included air to pupil

ratio, orientation of windows for optimum sunlight, classroom temperatures, methods of artificial ventilation, drainage and sanitation, and a ban on dry sweeping and wall-paper.[77] It was one thing to legislate these changes and quite another to enforce them. Still, the Protestant schools in Montreal did not fare badly. During the Royal Commission hearings, Anglophone physicians reported being satisfied with the board's schools, particularly the ratio of air space to floor space; commissioners noted that "the English pay more attention to ventilation."[78]

There were several reasons for this positive report card. By the turn of the century, most of the board's oldest schools had been closed and replaced by modern facilities; others had been enlarged and updated. The Protestant commissioners could afford to be more pro-active than their Francophone counterparts. As argued elsewhere,[79] the Catholic School Commission of Montreal served a much larger and underprivileged constituency yet received little more revenue than the Protestant board. Its earlier advantage—that it could rely on the services of the teaching orders—was no longer the case, as these religious groups now demanded much higher salaries for their members than lay teachers.[80] As well, the Protestant commissioners had received a wake-up call regarding unsatisfactory school conditions in the 1907 Hochelaga School fire. The deaths of teacher Sarah Maxwell and 16 of her kindergarten pupils refocused the school board's attention on construction materials which were not fireproof; the layout of schools especially the practice of situating kindergarten classes in attics; as well as on methods of heating and ventilating schools. In the aftermath of the tragedy, the board made an effort to build schools that were fireproof, evacuated without much difficulty, easy to keep clean, free of dust, designed to obtain maximum sunlight,[81] and properly heated and ventilated. By the time that the Royal Commission on Tuberculosis released its report in 1910, some of the largest Protestant schools had already been equipped with modern ventilating systems: electric fans replaced those that could only be operated when boilers were in use during winter.[82] Five years later, architects Nobbs and Hyde designed Bancroft School which was raised above grade level and contained large playrooms, well-lighted lavatories, a steam heating system, and indirect mechanical ventilation.[83] Finally, the school board was especially sensitive to criticism from the press. Take for example a November 1906 article published in the *Montreal Daily Star* which reported that recently installed ventilation systems in Mount Royal and Aberdeen schools had malfunctioned. The commissioners responded straightaway by striking a committee to look into the matter and report its findings the following day.[84] The school board saw itself as progressive and purposely sought new technology for its schools. The newly built Baron Byng High School, for example, boasted a ventilation system with two fans to freshen the school with air that had been

deodorized and purified, and two to remove it.[85] Other changes were afoot. Push bubble drinking fountains and roller towels replaced communal drinking cups and towels.

Montreal's Protestant school commissioners might well have been proud of these accomplishments, but by World War One, some of their schools were acutely overcrowded with children of newly arrived Jewish and Greek Orthodox families. *The Daily Mail* published a letter to the editor complaining about the "unsatisfactory conditions of the Protestant school in Mount Royal ward." The writer equated the school to a private home made up of small classrooms, too many pupils, and no ventilation and pondered why the medical inspector had not reported these unfit conditions. "Does the superintendent of the Protestant school board ever drop in there?" he asked, and suggested that school commissioners use tax money to erect a suitable building.[86] To accommodate these children and relieve overcrowding, the Board began a new building campaign in the interwar period.

The school board's conservatism, especially regarding financial matters, also meant that it was predisposed to respond to complaints about deleterious environmental issues around its schools, especially those located in working-class wards near industrial sites, rather than to initiate new policies. When Principal Rowland of Ann Street School in St. Ann's ward asked the school board to take action along with other property owners to demand a hiatus from the smoke of neighbouring factories, the school board authorized him to sign a petition on behalf of the school and the superintendent of schools to sign on behalf of the board.[87] Similarly, when Miss Stewart, principal of Britannia School in Pointe-St-Charles, complained about noxious odours emanating from the nearby abattoirs, she found sympathetic ears at the board. It appointed Commissioner (and Alderman) Turner to take up the matter with city officials. Commissioners also authorized Principal Stewart to speak to the medical examiner at her school for any evidence that could support a legal action against the offending parties. Turner reported that only one abattoir was responsible. A month later the commissioners decided to act against the offending business.[88] They also supported the activities of community organizations such as the City Improvement League. The board agreed to Dr. W. H. Atherton's request to make May 11 a city cleaning day so that everyone could tidy up yards and lanes and remove refuse.[89] Commissioners opposed building projects or denied requests from health-care providers if there were risks of exposing heathy school children to consumptive ones. When Dr. Harding asked for temporary space in one of the board's schools while a new open-air school was being built at the St-Urbain Street site, the school board declined. Similarly, in spite of frustration over a lack of treatment facilities for consumptive children, commissioners contested ardently plans to erect a

tuberculosis hospital—Hôpital du Sacré-Coeur—across the street from its Cartierville School. Commissioners hired a lawyer to represent the board's objections at a meeting with the city's Executive Committee.[90]

PUBLIC HEALTH EDUCATION

An important line of attack was public health education. Reformers believed that to combat the ignorance of one generation, a new one needed to be armed with knowledge. "Children have no prejudices," they argued, "and remember the hygienic training received in their youth all their life."[91] One of the responsibilities of medical school inspectors was public health instruction: "to inculcate a knowledge of hygiene among teachers, pupils and their families."[92] They were expected to give annual health lectures in each school.

A comprehensive school program that included healthful buildings and disease prevention, was quintessentially Protestant in character and included the rallying of the WCTU, MLCW, IODE, and Home and School troops, themselves products of the Protestant community. Just how much public health instruction Frederick Lear and fellow pupils were exposed to at school is extremely difficult to determine. The relationship between the school board, the city's health department, medical facilities, and community organizations is much more transparent in the school board minutes than the implementation of a school hygiene program. In other words, the school commissioners' promotion of public health in their official discourses reflected at the very least the importance they gave to it, but not necessarily the actual practices of the board. We know little about the frequency and universality of hygiene instruction in classrooms across the city. A strong desire to reach school children in matters of health education notwithstanding, the reality of implementing such a program in all city schools was another matter as the 1928 Montreal Health Survey reveals. The report deemed school health education inadequate, suitable health primers were in short supply, and facilities, such as open-air classes and summer forest schools, for children who were at risk for tuberculosis were non-existent.[93]

Nonetheless, public heath education was meant not only to educate about tuberculosis but it was understood to be a patriotic endeavour and the means to instill middle-class standards of hygiene. As Gleason argues, cleanliness was linked to middle-class membership; those who did not rise to the standard risked castigation and enforced compliance.[94] The Junior Red Cross was in a pivotal position to reinforce these values and thus preserve existing social relations; it demonstrated rather than told pupils how to stay healthy and promoted the notion that children were personally responsible for their health. "From comments received, there can be no doubt that this movement is doing much for

the development of healthful living. Placing the responsibility for the keeping of the ordinary rules of health on the child himself, and emphasizing the necessity of a sound body in order that he may be ready for service, it elevates the study of hygiene to the plane of a crusade."[95] Moreover, the Junior Red Cross motto, "I Serve," emphasized that children's first duty to Canada was to be healthy and that newly established habits of health would lead to a life-long interest in helping others.[96] While commissioners encouraged school principals to enforce such criteria of cleanliness among students, they objected when school medical inspectors sent children home for being dirty, an euphemism, according to Ellen Ross, for having lice.[97] It was one thing to treat the lice infestation and teach about prevention but quite another to remove children from school only to have them returned in the same condition. For many parents treatment was burdensome; it mean more work and an outlay of money which strained an already stretched household budget. The process of imbuing children with health standards which could not be met at home gave messages that contradicted those of many parents, created tensions, and left children, according to Mona Gleason, both empowered and frightened.[98]

The school board dispensed public health instruction to its students using a variety of pedagogical tools in diverse venues. At school, teachers, who were educated about tuberculosis prevention in hygiene courses at McGill College, taught disease prevention in their classrooms, using demonstrations, health primers, pamphlets printed by local and national anti-tuberculosis organizations, posters, and later, educational films. Students assembled in school auditoriums to hear health lectures given by medical staff from the Royal Edward Institute,[99] the Montreal Anti-Tuberculosis League, and from women's organizations such as the WCTU, IODE, MLCW, and Home and School associations. The WCTU, for example, drew a relationship between tuberculosis and intemperance: drinking led to alcohol abuse, impoverishment, and tuberculosis. It went after tobacco use among school-boys, arguing that it not only weakened the body, but "is the alcohol of children and adolescents."[100] School children also frequented city exhibitions.

In 1908, school commissioners distributed "A Catechism on Tuberculosis"[101] to all pupils attending city schools in preparation for the Tuberculosis Exhibition set to open in November. Children read that the most powerful enemies of tuberculosis was "thorough cleanliness, care of the health, temperance in all things, sunlight, fresh air, and abundance of good food."[102] This was a challenging prescription to fill given that the majority of children attending Montreal schools lived in neighbourhoods where sunlight, fresh air, and cleanliness were in short supply and where poverty was rampant and healthy food the prerogative of the middle class. Even the advice to drink a pint of milk at mealtime could be

hazardous to a child's heath; a 1914 milk survey showed that 90% of Montreal's milk supply was contaminated.[103] Public health education could not alter where these children lived nor help them exert any control over the circumstances of their lives. The prescriptive messages of the catechism were bolstered by visual displays at the exhibition.

For 10 days in November, Montreal's school children, aged 12 and older visited the Tuberculosis Exhibition at Auditorium Hall: Protestant pupils attended in the mornings; and Catholic school children went in the afternoons. On 19 November, for example, 1500 pupils from Montreal's Protestant schools attended: "The children had possession of the Tuberculosis Exhibition this morning. Downstairs, upstairs; in all the rooms; looking into all the exhibits; reading the charts; gazing at the pictures; poking their heads into the fresh air tent; listening to explanation's of apparatus; in front of the magic lantern sheet; everywhere children!"[104] They took home pamphlets about the best means to fight tuberculosis and foster dental hygiene; 300 entered an essay competition which was held in conjunction with the exhibition. Students at the High School of Montreal and the High School for Girls dominated the winners receiving prizes ranging from $1 to $5.[105] Four year later, school children flocked to the Child Welfare Exhibition where tuberculosis was central to its segment on health.

To draw the attention of both teachers and pupils to the subject of children's health, the Child Welfare Association recommended that the school board set aside a date to be officially known as Health Day. The commissioners went further; they approved a Child Welfare Health Week campaign in all of its schools**.** Physical education became an increasingly central component of health. What started timidly around World War I with physical drills, gained prominence in the interwar years. For instance, the 1938 Quebec Protestant Education Survey (Hepburn Report) included a section on "Health and the School" which advocated a comprehensive health program that emphasized the need for both healthy teachers and courses in hygiene instruction from school entrance to school leaving. It promoted physical education, weekly instruction in the hygiene of food and drink, courses in science, nature, home economics, and the environment, and reorganization of the curriculum to include frequent breaks to spent time out of doors or exercising in classrooms flushed with fresh air.[106] By the end of the war, Protestant schools boards sought and received grants to build gymnasia in all of their schools.

While Montreal continued to have a much higher tuberculosis death rate than Toronto, by the end of the depression, the numbers began to drop.[107] Improvement was in large part owing to a higher standard of living in addition to the widespread use of tuberculin tests and chest x-rays to detect asymptomatic tuberculosis and because bovine tuber-

culosis was being eradicated. Despite the controversy which surrounded the effectiveness of Bacillus Calmette-Guérin (BCG), in 1925 Université de Montréal researcher J. A. Baudoin began vaccinating newborn babies who had come into contact with tuberculosis. Quebec would be the first province in Canada to vaccinate its population. And in 1946, the provincial government finally allocated a substantial sum of money, $10,000,000 for the treatment of tuberculosis and three years after Selman Waksman discovered streptomycin.[108]

CONCLUSION

United in the battle against tuberculosis, school commissioners forged important links with the municipal health department, medical facilities, and social reform groups. These alliances were complex and contained class biases and obvious contradictions. The essentially conservative nature of the Protestant school commissioners meant that they never advocated transformations in social relations which would have resulted in better housing, healthier neighbourhoods, or equal access to medical services. Even during the depression, the board continued to depend upon home and school associations, service clubs, women's organizations, charities, its own principals and teaching staff, and better-off pupils to donate money, clothing, and shoes to indigent pupils and to provide mid-morning meals which were served to children suffering from malnutrition. The Junior Red Cross financed free dental clinics for children of poor families, one of which was in the William Dawson School.[109] When medical school inspectors routinely sent large numbers of school children home because of "uncleanliness," commissioners complained that the source of their grime was at home. They claimed that without some form of intervention on the part of medical authorities, nothing would change parents' ineptitude or neglect.[110] Like many of their contemporaries, school commissioners viewed tuberculosis as a disease of ignorance, and believed that by enlightening parents through education, child health would improve. If not with the parents' generation, then they would succeed with the next one. Because the majority of working-class families lived below the poverty line, children were expected to contribute to the household income after only a few years in school. That compulsory education came so late in Quebec (1943) meant that the school board had no direct influence on working school-age children. School commissioners failed to see that poverty, which left parents with few options when it came to providing medical care, nutritious meals, and better housing for their children, "was never tackled as a root of parental reluctance," as Mona Gleason so sagely points out.[111] Notwithstanding a range of motivations that included empathy, an earnest desire to do good, and real health concerns, they sought reforms that did not disturb the status quo.

After spending two years at the open-air school, Frederick Lear returned to Riverside School and resumed regular classes. Seventy-three years later, he wanted his family history to be part of the legacy of the Royal Edward Institute, an institution that had so profoundly affected his life. His history is also part of the legacy of the Protestant Board of School Commissioners. In the war on tuberculosis, Protestant school commissioners constructed important relations with child welfare reformers, medical experts, and the boards of health. In so doing, they promoted public health education, instituted systematic medical inspections in their schools, hired school nurses, built salubrious schools, and educated tubercular children. Clearly, school boards were not passive structures but agents of change. But they did have difficulty seeing beyond the discourse that regarded tuberculosis as a disease of ignorance.

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NOTES

1 Jeffrey Hale Burland was an entrepreneur, philanthropist, founder of provincial organizations that included the Boy Scouts and the Red Cross, and active on hospital and charity boards such as the Montreal General Hospital and the House of Industry and Refuge. He organized the first milk dispensary in Montreal. The fight against tuberculosis took up much of his interest, establishing the Royal Edward Institute and sitting on the provincial Royal Commission on Tuberculosis in 1910. C. W. Parker, *Who's Who and Why: A Biographical Dictionary of Men and Women of Canada and Newfoundland*, *Compiled for Newspaper and Library Reference*, Vol. 5 (Toronto: International Press Ltd., 1914), p. 153-54.

2 Letter to Duncan C. Campbell, President of the Montreal Chest Hospital Foundation from Frederick T. G. Lear, "For Family and the Royal Edward Chest Hospital," 23 November 1990.

3 As Protestants, school commissioners would have been influenced by the "Social Gospel," a social reform movement which pervaded English Canada and the western world. Proponents occupied all positions on the political continuum. Its radical tendencies set out to transform social relations in order to alleviate the miseries of poverty, notably poor health and wretched living conditions. While conservative activists pursued similar ends, they saw the physical effects of poverty as inextricably linked to moral and spiritual decline. Protestants who championed these different tendencies co-existed and called upon governments and institutions to take action to bring about change.

4 For Canadian studies, see George Jasper Wherrett, *The Miracle of the Empty Beds: A History of Tuberculosis in Canada* (Toronto: Univeristy of Toronto Press, 1977); Louise Côté, *En garde! Les représentations de la tuberculose au Québec dans la première moitié du XX^{e} siècle* (Sainte-Foy: Les Presses de l'Université Laval, 2000); and Benoît Gaumer, Georges Desrosiers, and Othmar Keel, *Histoire du Service de santé de la ville de Montréal, 1865-1975* (Ste-Foy: Les Presses de l'Université Laval, 2002). An exception is Katherine McCuaig, *The Weariness, the Fever, and the Fret: The Campaign against Tuberculosis in Canada, 1900-1950* (Montreal: McGill-Queen's University Press, 1999).

International studies include for example, Linda Bryder, *Below the Magic Mountain: A Social History of Tuberculosis in Twentieth-Century Britain* (Oxford: Oxford University Press, 1988); Sheila Rothman, *Living in the Shadow of Death, Tuberculosis and the Local Experience of Illness in American History* (New York: Basic Books, 1994); David Barnes, *Making of a Social Disease: Tuberculosis in Nineteenth-Century France* (Berkeley: University of California Press, 1995); and Katherine Ott, *Fevered Lives, Tuberculosis in American Culture since 1870* (Cambridge, Mass: Harvard University Press, 1996).

5 See Neil Sutherland, *Children in English-Canadian Society: Framing the Twentieth-Century Consensus* (Toronto: University of Toronto Press, 1976) and, "'To Create a Strong and Healthy Race': School Children in the Public Health Movement, 1880-1914" in S. E. D. Shortt, ed., *Medicine in Canadian Society: Historical Perspectives* (Montreal: McGill-Queen's University Press, 1981); Michael J. Smith, "Dampness, Darkness, Dirt, Disease: Physicians and the Promotion of Sanitary Science in Public Schools" in Paul A. Bogaard, ed., *Profiles of Science and Society in the Maritimes Prior to 1914* (Halifax: Acadiensis Press, 1990); and McCuaig, *The Weariness, the Fever, and the Fret*.

6 Roderick MacLeod and Mary Anne Poutanen, *A Meeting of the People: School Boards and Protestant Communities in Quebec, 1801-1998* (Montreal: McGill-Queens University Press, 2004). Funding for the Quebec Protestant Education Project was provided by the Foundation for the Advancement of Protestant Education in Canada.

7 Herbert Brown Ames, *The City Below the Hill: A Sociological Study of a Portion of the City of Montreal, Canada* (Montreal: Bishop Engraving and Print Co., 1897).

8 Montreal began filtering its water supply in 1914.

9 Pasteurization was legislated in 1926.

10 Ames, *The City Below the Hill*.

11 *Report of the Royal Commission on Tuberculosis* (1909-10), p. 15-16.

12 *Report of the Royal Commission on Tuberculosis* (1909-10), p. 22.

13 McCuaig, *The Weariness, the Fever, and the Fret*, p. 157.

14 McCuaig, *The Weariness, the Fever, and the Fret*, p. xvii.

15 Marie Gérin-Lajoie, Caroline Béique, and Joséphine Dandurand left the Local Council of Women in 1902-03 and formed the Fédération nationale Saint-Jean-Baptiste in 1907 as an alternative to the MLWC. They argued that to build support for women's rights in Quebec, a French Catholic organization was needed. Gérin-Lajoie disagreed with the Council's position that unity among women was a priority: "Our customs, our ideas, our language, everything is different; our race has a true personality allowing good friendship but forbidding assimilation." She also knew that Catholic philanthropic organizations would never join a Protestant Local Council of Women. (Marta Danylewycz, *Taking the Veil: An Alternative to Marriage, Motherhood, and Spinsterhood in Quebec, 1840-1920* (Toronto: McClelland and Stewart, 1987), p. 138-39.

16 Cynthia R. Comacchio, *Nations Are Built of Babies: Saving Ontario's Mothers and Children, 1900-1940* (Montreal: McGill-Queen's University Press, 1993), p. 3-5.

17 Kari Dehli, ""Health Scouts" for the State? School and Public Health Nurses in Early Twentieth-Century Toronto" *Historical Studies in Education/Revue d'histoire de l'education*, 2, 2 (1990): 250.

18 Terry Copp, *The Anatomy of Poverty: The Condition of the Working Class in Montreal, 1897-1929* (Toronto: McClelland & Stewart, 1974), p. 88-93.

19 The Royal Commission on Tuberculosis recommended school inspections, hygiene instruction in schools, open-air schools, legislation against child employment, and inspection of meat and milk to prevent bovine tuberculosis. *Report of the Royal Commission on Tuberculosis* (1909-10), p. 9-10.

20 McCuaig, *The Weariness, the Fever, and the Fret*, p. xvii.

21 McCuaig, *The Weariness, the Fever, and the Fret*, p. 58.

22 Copp, *The Anatomy of Poverty*, p. 102-3.

23 The city's proportion of the overall numbers of Anglophones in Quebec increased dramatically from 44% in 1901 to 65% in 1931. Ronald Rudin, *The Forgotten Quebecers: A History of English-Speaking Quebec, 1759-1980* (Ville St-Laurent: Institut québécois de recherche sur la culture, 1985), p. 179.

24 The 1845 and 1846 Education Acts named twelve commissioners for each city (Montreal and Quebec), to be divided into two "corporations," one Catholic and one Protestant, of six members each. A major departure from the liberal program advocated by Lord Durham, the law was consistent with the deep suspicion of democracy that characterized the establishment of the Union. Cities were seen as dangerous places. It was one thing to encourage local autonomy in small communities and quite another to promote it in urban areas where a hostile power base might form. Nonetheless, it is hard to comprehend the government's fear of an elected system based on property-holders, most of whom could be expected to support law and order. Roderick MacLeod and Mary Anne Poutanen, "'Crime Will Be Diminished and Vice Essentially Repressed': Social Regulation and the Promotion of a Public School System in Montreal, 1836-1869" unpublished paper presented at the CHA Meeting, Dalhousie University, June 2003, p. 17.

25 The importance of health and social welfare was also clearly spelled out in a 1942 draft bill, which followed on the heels of the Hepburn Report. Its architects set out to increase the board to fourteen commissioners, eleven elected and three special-interest commissioners who would be appointed. The three nominees would be a clergyman, an expert in social welfare problems, and a specialist in public health. *Draft Act Revising Montreal Protestant Central School Board, May 1942* in the Appendix to Keith J Dowd, "The First County School Board in Quebec" MA Thesis (McGill University, 1956), p. 111-22 cited in MacLeod and Poutanen, *A Meeting of the People*, p. 446. The bill never saw the light of day.

26 English Montreal School Board Archives [hereafter EMSBA], S-0158, *Protestant Board of School Commissioners (PBSC) Minute Book*, Vol. 8 (6 May 1903–7 March 1907), 14 January 1904.

27 Its long list of duties included factory inspections, enforcing housing standards and compulsory immunization, ensuring the purity of milk and water, inspecting meat and food, and developing health facilities. Copp, *The Anatomy of Poverty*, p. 92.

28 Archives de Ville de Montréal (hereafter AVM), VM 21, Health Committee (City Council of Montreal), Board of Health, *Minutes of the Meetings*, Vol. 23 (11 May 1911–2 February 1920) 14 September 1906.

29 *Report of the Protestant Board of School Commissioners of Montreal* (from September 1906 to September 1907), p. 18.

30 EMSBA, S-0159, *PBSC Minute Book*, Vol. 9 (18 April 1907–14 October 1909), 17 October 1907.

31 *Report of the Protestant Board of School Commissioners of Montreal* (from September 1907 to September 1908), p. 19.

32 AVM, VM21, Health Committee (City Council of Montreal) *Minutes of the Committee on Hygiene and Statistics*, Vol. 19 (15 March 1907–22 April 1908) 15 April 1907.

33 AVM, VM21, Health Committee (City Council of Montreal) *Minutes of the Committee on Hygiene and Statistics*, Vol. 19 (15 March 1907–22 April 1908) 2 May 1907.

34 Dehli, "Health Scouts" for the State?," p. 250; and M. Ewart, "Home Visiting in Connection with School Nursing" *The Canadian Nurse*, 12, 6 (June 1916): 307-8.

35 Ellen Ross, *Love & Toil: Motherhood in Outcast London, 1870-1918* (New York: Oxford University Press, 1993), p. 209-13.

36 This number includes women doctors hired to examine female high school students.

37 Gaumer, Desrosiers, and Keel, *Histoire du Service de santé de la ville de Montréal, 1865-1975*, p. 94.

38 *Report of the Protestant Board of School Commissioners of Montreal* (from September 1908 to September 1909), p. 11.

39 EMSBA, S-0159, *PBSC Minute Book*, Vol. 9 (18 April 1907–14 October 1909), 14 January 1909.

40 Montreal Chest Institute Library, *The Anti-Tuberculosis Movement in Montreal and the Foundation of the Royal Edward Institute: A Retrospect and a Prospect* (Montreal, 1909), p. 20-21.
41 Mona Gleason, "Race, Class, and Health: School Medical Inspection and 'Healthy' Children in British Columbia, 1890 to 1930" *CBMH/BCHM*, 19 (2002): 101.
42 EMSBA, S-0161, *PBSC Minute Book*, Vol. 11 (12 September 1912–17 September 1914), 17 September 1914.
43 Archives de Commission Scolaire de Montreal (herefater ACSM), CECM, 8 - Bureau médicale, Organisation et fonctionnement de l'inspection médicale dans les écoles, *Lettre à la Commission des Ecoles Catholiques de S. Boucher, Directeur du Service de Santé*, 11 janvier 1926.
44 Montreal Health Survey Committee, *Survey Public Health Activities* (Montreal: The Metropolitan Life Insurance Company, 1928), p. 91-92.
45 ACSM, CECM, 8 - Bureau médicale, Organisation et fonctionnement de l'inspection médicale dans les écoles, *Lettre à la Commission des Ecoles Catholiques de S. Boucher, Directeur du Service de Santé*, 12 décembre 1919.
46 EMSBA, S-0160, *PBSC Minute Book*, Vol. 10 (11 November 1909–10 June 1912), 18 January 1912.
47 *Report of the Protestant Board of School Commissioners of the City of Montreal* (1 October 1919–30 September 1920), p. 41-42.
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52 Montreal Chest Institute Archives, ID#16, 30 March 1942.
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54 A surgical procedure which by removing portions of the upper ribs on one side, the affected lung collapses allowing for the infection to heal.
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94 Gleason, "Race, Class, and Health," p. 104.
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97 Ross, *Love & Toil*, p. 214.
98 Mona Gleason, ""Don't feel today like speaking": Children, Experts, and Conceptions of Health in English Canada, 1900 to 1950," unpublished paper given at the McCord/AMS Colloquium, Comparative and Interdisciplinary Approaches to Child Health in the 20th Century, Montreal, 30 October 2004.
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beneficial in aiding a diminution of the death-rate by tuberculosis and in raising the standard of the general health of the city." It organized a series of talks for children aged ten and older on a variety of topics related to tuberculosis: the epidemiology of the disease, its relationship to housing (ventilation was an important subject), dress, diet, alcohol abuse, and treatment. *Charter and By-Laws and First Annual Report, Royal Edward Institute for the Study, Prevention and Cure of Tuberculosis* (1910), p. 47.

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101 The premise of the pamphlet was that tuberculosis was a "a disease of ignorance" and children would remember hygienic training all of their lives. MCI, Montreal League for the Prevention of Tuberculosis, *Minutes of the Publication Committee*, 23 October 1903. The catechism informed children that they could prevent tuberculosis by learning about the disease: its symptoms, how it is spread, and how to avoid exposure to the tubercle bacillus. Morality themes informed the catechism: drinking alcohol not only reduced a person's resistance to the disease but resulted in "poverty, unhealthy surroundings, and misery." Children were also warned against spitting, licking, sticking objects into their mouths, trading chewing gum or food with classmates, sharing pea shooters, and to practice public health techniques such as covering their mouths when coughing and washing their hands regularly with soap and water. Montreal Tuberculosis League, "A Catechism on Tuberculosis" (Montreal, 1908), p. 1-16.

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