Saskatchewan Cares for its Own
and
Defines Being Canadian for Canadians

Prepared for
Winning the Prairie Gamble
Saskatchewan Western Development Museum

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16 August 2002
(revised 9 September 2002)

Introduction

The high level of health care we enjoy today, across Canada, was built up, plank by plank, over years of trying to make things better for families. It's been a towering achievement. And much of it happened in Saskatchewan. It has required a sustained investment in energy and money, often in the face of terrible discouragement and set-backs. The vision of special individuals has been critical in the long evolution of caring, optimism, bullying, research, regulation and clamp-downs which eventually resulted in our tradition of rural co-operative progress and advance, unique in Canada. It is why Medicare happened HERE.

I. Health Concerns in the Northwest Territories

Early epidemics spread by the fur trade along trade routes
During the early to late 1800s, fur trade brigades spread diseases such as smallpox, measles, influenza and scarlet fever from the Red River settlement and the US mid-west along northern and southern trade routes of the Northwest Territories. First Nations people suffered terribly. Early vaccines saved many lives, both aboriginal and others.

High levels of immigration brought a rise in infectious diseases
Private people and communities tried their best. The Territorial government brought in many new health ordinances for the control of diseases. Health information in many languages was given out. Importantly, statistics began to be collected which would allow assessment of the progress in the fight against disease. Gradually, some control over infectious diseases being brought into the province was gained and a new consciousness of sanitation and the spread of infectious disease arose.

There were no health services to deal with war wounded, disease, and accidents
At the time of the Northwest Rebellion in 1885, there were no hospitals. Trained nurses and others volunteered to care for the wounded, resulting in a new group of local trained nurses, higher care standards and a few more care facilities. The public was desperate for help to deal with epidemic disease, farming accidents, childbirth and death. Some examples illustrate the situation: a man's hands were crushed, so he rode 70 miles to hospital on an unfinished road to have a double amputation at a Cottage Hospital; a trapper's campfire burned his bed of boughs, so he walked 16 miles to the nearest house, arrived frost-bitten, then was driven 30 miles to hospital.

The Victorian Order of Nurses built many local hospitals, trained local people
The value of the contributions made by the VON to Saskatchewan cannot be overstated. In 1898, the **first Cottage Hospital in Canada** was set up in Regina under their new scheme to help establish hospitals in sparsely settled areas. Twelve more were opened by 1907. Nurses visited people in the surrounding areas and provided care and education. Fund raising for community hospitals began to gather momentum. Donations to Prince Albert's Victoria Hospital included two nightshirts, six cakes and a brace of prairie chickens.

II. Saskatchewan Becomes a Province, 1905

The Public Health Act of 1909 and Dr Seymour's public health initiatives
Dr Seymour now oversaw public health, communicable disease, dairy and milk, hotels and restaurants,

water and sewage. Typhoid, diphtheria, scarlet fever, infant diarrhoea, measles, tuberculosis, pneumonia, whooping cough were the major diseases. In 1910, Seymour began a new crusade: **water supplies or sewage disposal works** could not be built in Saskatchewan without the approval of the plans and specifications by the government. This was **critical, pioneering legislation** aimed at stopping the spread of many diseases through contaminated drinking water. New sewage disposal plants were built in five cities and at Saskatoon a new water filtration plant, the **first of its kind in western Canada**, was begun.

Specific measures aimed at specific diseases

In 1911 **free typhoid vaccine** distribution began in the province. By 1921, there was a massive decrease in cases. A full-time doctor was appointed to deal with infectious eye disease, treating 712 cases in 1912. Realizing that TB was on the rise, Dr Seymour spearheaded the formation of the **Saskatchewan Anti-Tuberculosis League** in 1911 and the building of a **sanatorium at Fort Qu'Appelle** which opened in 1917. It would serve thousands of victims, both white and First Nations people. In some provinces, First Nations people could not register at sanatoria.

The school nursing program

When it became obvious that killers such as diarrhoea, scarlet fever, whooping cough, measles and diphtheria were being caught at school and taken home to where living conditions were often poor, school nurses were hired to look for chronic illness, parasites and dental health. Perhaps their most important public health role was visiting the homes of infected pupils kept out of school and the untreated chronically ill, where preventive education was given and unsuspected cases reported and treated. From there, nursing expanded into the community at large, becoming true public health nurses for the first time.

III. Health Care in Saskatchewan During the Great War

Saskatchewan provided health services to the poor

An **important Saskatchewan Supreme Court judgement** which said that a person was indigent when "unable to provide for himself what he needed" made it much easier for poor people to get help. Free TB care was provided to them after 1920 through a pool of RM taxes. As well, more free services were provided to all: most Saskatchewan children had been vaccinated free for smallpox by 1918. Deaths from smallpox fell dramatically. In 1918 the province distributed 39 million diphtheria anti-toxin doses: mortality was cut in half between September 1917 and September 1918. The government was responding to a rising expectation of free health care.

Lady Grey Country District Nursing Scheme of the Victorian Order of Nurses

The Lady Grey Country District Nursing Scheme organized local Women's Institutes, Grain Growers Associations, and Saskatchewan Homemakers Clubs to supply nurses for people on farms and homesteads. Nurses went out by horse up to a 20 mile radius from a central "home" where there was room for one or two patients. They gave invaluable training and education. By 1916, 11 Country Districts had been organized, most of them in Saskatchewan.

North America's first Municipal Doctor prompted the Municipal Hospital Act

In 1915-16, the RM of Sarnia paid a Dr Schmitt a stipend from municipal funds to provide medical services to the RM. Then the Municipal Hospital Act allowed RMs to grant doctors up to $1500 to

supplement their incomes. By 1919, RMs could hire doctors on salary to provide medical services at no charge to residents. Many communities now had local health care and rural and village doctors stable incomes.

Public health education at school: the Junior Red Cross Clubs (JRC)

In 1915, Saskatchewan registered nurse and school teacher, Miss Jean Browne, organized the **first official Junior Red Cross charter in the world** at Northgate, Saskatchewan. Miss Browne went on to become the Director of the National JRC office in Toronto. JRC grew rapidly across Canada. Saskatchewan clubs helped about 600 club foot and cleft palate victims, common among new immigrants, and paid many hospital and patient transportation bills. Doctors in the province contributed to the JRC program by operating **free of charge**.

Child Welfare Conferences or "Baby Shows"

Of the 2,283 children under five who died in Saskatchewan in 1916, 1,756 were under one year of age, dead from bronchitis, pneumonia and digestive problems. Baby and preschool clinics, also called **Child Welfare Conference**s, were begun by Dr Seymour in 1916 at Regina and Weyburn. Babies and their progress were evaluated by score card. Information was given out about the care and feeding of babies and children, the dangers of flies, bad sanitation and impure milk. Eventually the event included public health lectures, free literature on VD, TB testing of cattle and home nursing classes. In 1923, 67 clinics were held and 3,218 children examined.

The Union Hospital District Act (UHDs)**, 1916**

By 1916, it was realized that semi-private organizations such as the VON could not go on indefinitely sponsoring the development of hospitals in Saskatchewan and the province set up a scheme to encourage new municipal and community hospitals. This was particularly important for health care in the north, where maternity and emergency services were badly needed. Municipalities banded together, forming UHDs to share tax money to build and operate rural hospitals. By 1920, there were ten UHDs. Many more were built in the next 20 years.

Municipalities tried desperately to slow the spread of the "Spanish Flu" virus

More Saskatchewanians were killed by the flu epidemic of 1918-1919 than were killed in France during the First World War. In fact, many who survived the war returned home, only to be struck down by the flu. Frighteningly, the flu killed healthy people in the prime of life; whole families were wiped out; some died within 24 hours. In some towns, there was a $50 fine for spitting, sneezing or coughing in public and public meetings were banned. The devastation of the epidemic fuelled demands for better public health nursing, home nursing courses, more rural hospitals. By 1920, 5,018 deaths had been recorded, many of these from pneumonia. Northern communities were badly hit in the 1920s: the crowded living conditions of First Nations people made them very susceptible. The economy of the entire nation was affected, a severe blow during wartime. In Saskatchewan, there were many orphans left and many farm animals died when no one was left alive to feed them.

IV. Postwar Public Health

The government rises to the needs of the people with increased health services. In the 1920s the PHD emphasized research, testing and finding unsuspected cases of infectious disease, and free vaccination

programs.

Permanent public health established and services expanded
In 1917, **Saskatchewan became the second province** (after Manitoba) **to have a Registered Nursing Act**. The Association was the **first to link with a university**. Nurses visited schools and homes, organized treatment clinics across the province, provided health education programs on maternal and child health. **Restaurant inspections** began in 1920. That year **full time VD dispensaries and clinics** were set up discreetly in office buildings in four cities to provide **drugs and treatment free of charge**. There were new maternity grants. In 1921 Dr Seymour made a health survey of the north, where the prevalence of disease was unknown, and opened a new mental hospital at Weyburn where the mentally ill and alcoholics were treated free.

Red Cross Outpost Hospitals
The Red Cross Society was organized in Saskatchewan in 1913 and, led by Jean Browne, **pioneered a pilot project to set up Outpost Hospitals** to care for the sick from newly developed soldier settlement areas after the war. These were small buildings, and were intended to serve local areas, staffed by nurses and assisted by local hospital board and women's auxiliaries. The **first Outpost Hospital in Canada** was set up at Paddockwood and opened in October 1920. By 1923 as well as 10 Red Cross outposts, there were 43 Union Hospitals.

The new Department of Public Health amended and reorganized public health from 1923 to 1926
The DPH, under minister Dr Ulrich and deputy-minister Seymour, presided over the Public Health, Vital Statistics, Union Hospitals, and the Venereal Disease, appointed sanitary officials and oversaw all health programs transferred to it from the Department of Municipal Affairs. Under Seymour the work of the Department was greatly enlarged. In the late 1920s, the DPH carried out extensive work in rural and urban communities throughout the province: prenatal, natal, infant, preschool and preschool exams, TB surveys in schools, on reserves, baby clinics, home nursing classes, immunization programs for diphtheria and smallpox.

Pioneering government initiatives to combat TB
Canada's first tuberculosis multi-community school survey showed in 1921 that TB was rampant among children and cattle; many new measures were put into effect in 1922 to combat it. The survey also provided information about other afflictions in Saskatchewan communities.
As a result, the Saskatoon san was built in 1925. In 1928, a new TB project at the Qu'Appelle Indian Health Unit tested and treated school children, with excellent results. **North America's first completely free diagnosis and treatment for TB** was started in Saskatchewan in 1929, spearheaded by the Saskatchewan Association of Rural Municipalities and the Saskatchewan Urban Municipalities Association. The extent of TB led to the travelling clinics and mass surveys of the 1930s, '40s and '50s. Many more cases were caught in their early stages, an important step in prevention, as were **cattle and dairy testing programs**. Pasteurization of milk eliminated 98% of total milk bacteria.

Public health nursing expanded yet again; public health districts created
Dr Seymour increased maternity grants to discourage unattended home births. Although use of the grant grew from 17 mothers in 1920 to 427 in 1924, in 1926 the maternity death rate in Saskatchewan was the highest in Canada. Public health nurses scrambled to try to deal with the crisis. They taught child care in co-operation with women's organizations. Baby clinics were organized on reserves by nurses of the Indian Department. The VON co-operated with DPH in supplying nurses to give practical

demonstrations in prenatal, natal and infant welfare in rural areas. Home nursing classes were held in 18 locations, with hundreds of women and older children attending. In 1928 a new **Division of Public Health Nursing** was formed; the next year there were 88 public health nurses in Saskatchewan.

Saskatchewan Cancer Commission pioneering initiatives
In 1924, for the first time, cancer deaths beat tuberculosis deaths by one case. Many patients sought treatment when the disease was too far advanced. In 1929 the Saskatchewan Medical Association appointed a committee to look at available cancer treatment facilities. In 1930, the **Saskatchewan Cancer Commission Act** started a new cancer program with the opening of the **emanation plant at the U of S** to make radon seeds for cancer treatment . The only other in Canada was in Montreal. **Free consultative diagnostic and treatment clinics** were opened at Regina and Saskatoon by the end of 1931. Cancer deaths continued to rise, however, because of the backlog of untreated cases.

Free vaccines provided; disease statistics, research, and sanitation important
The Communicable Disease Division distributed vaccines, supervised TB and co-operated with local health authorities and doctors in tracking 44 communicable diseases. Aggressive vaccination programs fought diphtheria, smallpox and typhoid. The Bacteriology Division did thousands of free lab examinations for infectious and communicable diseases and sanitation inspections at slaughter houses and summer resorts, all free of charge, at public expense. The Division of Sanitation's civil engineers supervised water and sewage to prevent disease caused by pollution or infection of water, air, milk, and food. Death rates fell. The great research effort on diseases created enthusiasm among public health workers and **health care expectations rose again among the general public**.

V. Depression Difficulties

The terrible conditions of the Depression and drought left governments strapped: fewer municipal levies were paid, relief efforts were expensive, and public health was needed more than ever.

Saskatchewan Anti-Tuberculosis League (SATL) geared up for a major assault on TB
The "White Plague" was still the leading killer of young people. SATL funds were essential. During the 1930s travelling clinics covered the southern province. **Aerial access to northern communities** allowed surveys of remote schools for the first time. Free diagnosis and treatment, available to all, slowed the spread of TB. First Nations were now getting treatment: infection fell dramatically and infant deaths dropped by 20% after the BCG program. BCG vaccine, shown in Saskatchewan to be safe, began to be used worldwide. As ground was gained in the war, fewer people were being exposed to TB and becoming immune. The focus turned to finding cases among apparently well people, to prevent them from spreading it.

Saskatchewan continued health care advances during the costly Depression
Because few people could afford to pay their doctors during the Depression, in 1931 the government arranged to support doctors and dentists. In one badly hit area, 80 of 100 doctors applied for relief. Municipal hospital regulations were relaxed to allow them to raise more money and municipal doctors' salaries were increased. After 1936, grants were increased to hospitals. Public health nurses helped in relief distribution of milk and clothing across the province. Education was increased as a cost effective way to inform and provide support for those stressed by the Depression. The investments of the DPH in the Depression paid off. By 1932, after a long and difficult battle, Saskatchewan **maternity**

mortality rate was the lowest in Canada. Improved sanitation and milk quality also contributed: there were no deaths among 658 cases of smallpox 1931, Saskatchewan's last serious outbreak. The typhoid fever death rate fell from 33 per 100,000 population in 1911 to 2.5 in 1936.

VI. The Second World War and its effects on health care in Saskatchewan

Experimental health insurance plans
The year 1939 saw several attempts to provide health care at low cost. The **Municipal Medical and Hospital Services Act** allowed RMs to raise taxes for health services from both property and individuals. By the 1940s,many RMs had programs for low cost hospital care and doctors services. The **Matt Anderson Health Plan**, begun in 1939 by a Norwegian immigrant farmer in the Bulyea area, was adopted by at least 45 district by 1955. After years of lobbying, a government order-in-council permitted Reeve Anderson to collect taxes to pay for health care, in the RM of McKillop only. Residents paid a premium of $5, to a maximum of $50 per family, for unlimited access to a municipal doctor, up to 21 days hospital care, and prescription drugs. By 1955, the premium had risen to $20 per person to keep up with costs. Premier Douglas asked Mr Anderson to help draft his provincial health insurance plan of 1962. Also in 1939, a group of laymen in Regina **hired local doctors on salary** and began a medical insurance plan. In response, Regina doctors quickly set up their own medical insurance plan and pressured doctors not to sign on to the laymen's plan.

Saskatchewan's pioneering mass TB x-ray surveys began
Melville was the site of **Canada's first mass radiographic survey for TB** in 1941. Soon after, Moose Jaw became the **first city in North America to x-ray all of its residents**. First Nations schools were tested and follow-ups done. With ever-increasing Christmas Seal fundraising, even small communities could afford to be surveyed. By 1947, the entire province had been x-rayed for the first time: 74.1% of the non-First Nations population. The SATL travelling x-ray vans became an icon of the fight against tuberculosis. Saskatoon set several records in 1948 for speed in putting residents through the x-ray. The value of these famous surveys in preventing the spread of TB cannot be overstated. The case finding rate fell to .06 per 1000 tested by the end of 1945.

New training programs, free treatments and services provided during the war
By 1939 there were three sans and 80 hospitals approved by the government. In 1939, the University of Saskatchewan **nursing school** was established. Training now included a public health course. There was an increase in the need for classes in home nursing and first aid. In 1941, **routine infant immunization** began when all new mothers received letters requesting that their newborns be vaccinated against whooping cough. Northern health services were reorganized and improved and new immunization programs put in place. The **Cancer Control Act of 1944** provided free diagnosis, treatment and hospitalization for cancer patients. Soon after, **free hospitalization** was available for those on social assistance, and with TB, mental illness and VD. The next year, **free medical, hospital and dental care** was provided to pensioners, mothers allowance recipients and indigents and their dependents. Polio victims were also supported and DPH staff were sent to Chicago to be trained in new methods. In 1946, the new provincial Air Ambulance service, the **first of its kind in North America**, was invaluable in getting polio victims and others to hospitals quickly.

VII. The road to universal medical insurance

North America's first comprehensive health insurance system was based on rural Saskatchewan traditions which had evolved long since into co-operative policies and institutions, many of which were unique in Canada, and which help explain why public health insurance evolved in this province. Although these rural traditions waned after the Second World War, as people relied less on agriculture, became more prosperous and moved into cities, the election of a social democratic government with its sustained commitment to publicly funded universal health care insurance allowed many aspects of rural traditions to become embodied in the new program.

Douglas becomes premier of Saskatchewan, sets up Health Planning Commission
With postwar prosperity and the early implementation by the CCF of free medical services, there was a great deal of optimism in Saskatchewan. When T.C. Douglas became premier in 1944, he set up the **Health Planning Commission** (HPC) to plan for the introduction of state-funded hospital insurance and comprehensive public health insurance. Because the federal government dragged its feet over financing of public hospital insurance when the "have" provinces refused to sign on at the Federal - Provincial Conference, Douglas was not able to implement the entire program at home as he had planned. After an initial demonstration project at Swift Current Health Region No. 1 in 1946, Canada's very **first hospitalization insurance scheme**, Douglas proceeded to put in place the hospitalization aspect first.

The Saskatchewan Hospitalization Insurance Plan, 1947
The government announced the **Saskatchewan Hospitalization Insurance Plan** (SHIP) in 1946, effective January 1, 1947. The compulsory Plan was based on five principles: prepayment, universal coverage, high quality of service, administration in a public body responsible to the legislature, and acceptability to those providing and receiving the service. **Inpatient hospital services were funded** by a premium of $5 per person, to a maximum of $30 per family. Those needing hospitalization could go to any hospital in the province on the recommendation of their doctor, without charge. By the end of 1947, 93% of Saskatchewan residents were on the plan. The government also expanded the creation of health regions and Union Hospital Districts. SHIP funnelled money into building and upgrading of hospitals. From having the lowest bed capacity in Canada in 1944, by 1954 **Saskatchewan had the highest**. This encouraged some doctors to return to the province, ironically strengthening private urban health insurance plans. While doctors resented the Health Planning Commission, the Swift Current project, and the expansion of health regions, UHDs and the Municipal Doctor System, they were in favour of SHIP because it benefited them. The growth of hospitals and health infrastructure in Saskatchewan between 1944 and 1962 was the **best in Canada** and encouraged greater use of health services, long overdue from the Depression. This continued through the 1950s. By 1958, Saskatchewan doctors were the best paid in Canada.

Discontented medical profession
With postwar prosperity, the expansion of hospitals and services and the new reality of the SHIP, doctors' incomes grew and the scope of their practices increased. Government did not expand the Swift Current model to the other 13 health regions at a time when the medical profession was increasing its sphere of influence. Conflicts between government universal insurance and the growing alternative, urban medical profession-controlled private insurance plans such as Medical Services Inc. (MSI) and Group Medical Services (GMS), came to a head with the Doctors' Strike of 1962, over the government's proposal to put doctors on salary. About 90% of **doctors in the province struck** for 23 days, the first doctors' strike ever in North America. British physicians were brought in to provide services, causing more bad feelings. With the world looking on, the political commitment of the

Woodrow Lloyd government never wavered, but the weakening of its control over universal insurance in rural regions by the mid 1950s gained the medical profession leverage in their negotiations during the strike. Government capitulation on the direct fee-for-service issue convinced doctors to end the strike.

The Medical Insurance Act, 1962

The Medical Insurance Act became law on July 1, 1962, but the fee-for-service clause spelled the end of the rural tradition in Saskatchewan health care by the early 1960s. The need for the salaried municipal doctor disappeared, because doctors were now paid by the government. Many villages soon lost their doctors. Many doctors moved to Regina and Saskatoon. There was lasting leftover resentment.

The rest of Canada adopts the Saskatchewan model

Government medicare system founded in Saskatchewan became the **model for the rest of the country**. The federal government enacted medical care legislation in 1968 and by 1972 all provincial and territorial plans had been extended to include doctors' services.

Bibliography

Anonymous
1944 "Distribution of Penicillin for Civilian Use in Canada." Canadian Journal of Public Health 35(10):407-408.
Bailey, Ray
2001 Interview, by Renée Tratch, 12 October 2001.
Becker, A.
1976 "The Lake Geneva Mission, Wakaw, Saskatchewan." Saskatchewan History 29(2):51-64.
Browne, Jean E.
1914 "School Nursing in Regina." Public Health Journal 5(1):91-93.
1931 "Contributions of Junior Red Cross to Public Health." Canadian Journal of Public Health 22(2):99-100.
Davis, May
1956 "A Pinafored Printer." Saskatchewan History 9(2):63-69.
Davison, R. O.
1933 "Saskatchewan's Programme for Cancer Control." Canadian Public Health Journal 24(12):566-571.
1940 "Public Health in Saskatchewan." In Defries, ed., pp. 131-142.
Defries, Robert F., ed.
1940 Development of Public Health in Canada. Canadian Public Health Association, Toronto.
Dickin McGinnis, Janice P.
1981 "The Impact of Epidemic Influenza: Canada, 1918-191." In Shortt ed. pp. 447-477. Originally published in Historical Papers, Canadian Historical Association, 1977:121-140.
Editorial
1931 "Public Health Progress in Saskatchewan." Canadian Journal of Public Health 22(5):248-261.
Gibbon, John Murray
1947 The Victorian Order of Nurses for Canada. 50th Anniversary, 1897...1947. Victorian Order of Nurses for Canada, Montreal.
Hone, McGregor
1953 "Butler's 'Great Lone Land'". Saskatchewan History 6(1):24-29
Historical Treasures and Ancient Arts
2000 The Dalby Engine. CD-ROM. HTAA, Saskatoon.
Houston, C. Stuart
1990 "Early Saskatchewan Hospitals" Annals RCPSC 23(3):265-270. Royal College of Physicians and Surgeons of Canada
1991 R.G. Ferguson: Crusader against Tuberculosis. Dundurn press, Toronto.
1993 "Ferguson's BCG Research - Canada's First Randomized Clinical Trial?" Clinical Investigations in Medicine 16(1):89-91.

Houston, C. Stuart
1994 "Saskatchewan's municipal doctors: a forerunner of the medicare system that developed 50 years later." Canadian Medical Association Journal 151(11):1642-

1644.
1998 “Maurice MacDonald Seymour: Leader in Public Health.” Royal College of Physicians and Surgeons of Canada, Annals 31(1):41-43.
Kendrick, T.D.
1933 “Trachoma in Saskatchewan.” Canadian Public Health Journal 24(1):46.
Lux, Maureen
1989 “The Great Influenza Epidemic of 1918-20.” Green and White, winter issue.
MacKenzie, Ian A.
1944 “Health Insurance.” Canadian Journal of Public Health 35(6):213-233.
MacMurchy, Helen
1931 “Classification of Maternity Deaths.” Canadian Journal of Public Health 2210):412-419.
McCuaig, Katherine
1999 The Weariness, the Fever, and the Fret: The Campaign against Tuberculosis in Canada 1900- 1950. McGill-Queen’s University Press, Montreal & Kingston, London, Ithaca.
McIntyre, John W.R. and C.S. Houston
1999 “Smallpox and its Control in Canada.” Canadian Medical Association Journal 161(12):1543-1547.
Middleton, F.C.
1933 “Evolution of Tuberculosis Control in Saskatchewan.” Canadian Journal of Public Health 24(11):505-513.
Moag, Margaret, L.
1933 “The Public Health Nurse.” Canadian Journal of Public Health 24(5):244-247.
Nebel, Mabel R.
1958 “Rev. Thomas Johnson and the Insinger Experiment.” Saskatchewan History 11(1):1-17.
Ostry, Alec
? “The Roots of North America’s First Comprehensive Public Health Insurance System.”
Pettigrew, Eileen
1983 The Silent Enemy: Canada and the Deadly Flu of 1918. Western Producer, Prairie Books, Saskatoon.
Porter, George D.
1949 “Pioneers in Public Health.” Canadian Journal of Public Health 40(1):1):85.
Porter, McKenzie
1960 To All Men. The Story of the Canadian Red Cross. McClelland and Stewart, Toronto.
Ray, Arthur J.
1981 “Diffusion of Diseases in the Western Interior of Canada, 1830 - 1850.” In Shortt, S.E.D., ed. Medicine in Canadian Society: Historical Perspectives, pp. 46-73. Originally published in Geographical Review 66(2)(April 1976):139-157.
Riddell, W. S.
1950 “Sero-Diagnosis and Treatment of Syphilis in the Remote northern Areas of Saskatchewan.” Canadian Journal of Public Health 41(1):41.
Robinson, Marguerite E.
1967 The First Fifty Years. Saskatchewan Registered Nurses Association, Regina.

Saskatchewan. Bureau of Public Health
1912 "Annual Report of the Bureau of Public Health for the Province of Saskatchewan 1910." Regina.
1919 "Annual Report of the Bureau of Public Health for the Province of Saskatchewan 1917-1918." Regina..

"Saskatchewan"
1931 "News & Comments." *Canadian Journal of Public Health* 22(1):49.
1933 "News Notes." *Canadian Public Health Journal* 24(2):199; 24(5):253; 24(6):299-300; 24(10):501
1949 "News" *Canadian Journal of Public Health* 40(4):190-191; 40(9):402; 40(10):444.
1950 "News" *Canadian Journal of Public Health* 41(8):355; 41(11):478; 41(6):261-262

Seymour, Maurice M.
1925 "Public Health Work in Saskatchewan." *Canadian Medical Association Journal* 15:271-284.

Shortt, S.E.D., ed.
1981 *Medicine in Canadian Society : Historical Perspectives*. McGill-Queen's University Press, Montreal.

Simpson, Ruby M.
1931 "Public Health Nursing in Saskatchewan." *Canadian Journal fo Public Health* 22(3):130-134.

StarPhoenix
2000 "Saskatchewan 2000: a journey through time" SSP 1 Jan 2000. Special commemorative section, p 22, Saskatoon Health District, Public Health Services: "A History of Public Health: Promote, Prevent, protect"

Sutherland, Neil
1981 " 'To Create a Strong and Healthy Race': School Children in the Public Health Movement, 1880-1914." In Shortt, ed 1981:pp. 361-393. Originally published in *History of Education Quarterly* 12(3)(1972):304-333.

Telford, Gertrude S.
1951 "The First Child Welfare Conferences in Saskatchewan" *Saskatchewan History* 4(2):57-61.

Tratch, Renée
2000 "Who's this Mr. Anderson?" Ms.

University of Saskatchewan
2002 http://www.usask.ca/cgi-bin/fb/index.cgi?what=showfull;itemid=216
http://www.usask.ca/cgi-bin/fb/index.cgi?what=showfull;itemid=229

Watson, T. A.
1950 "Incidence of Cancer in Saskatchewan in 1948." *Canadian Journal of Public Health* 41(8):308-313.

Wherrett, George J.
1977 *The Miracle of the Empty Beds: A History of Tuberculosis in Canada*. University of Toronto Press, Toronto, Ontario.

Wilson, Arthur
1933 "Federal Inspection of a Municipal Meat Supply." *Canadian Journal of Public Health* 24(10):479-484.