TUBERCULOSIS CONTROL IN MANITOBA 1952

Annual Report of the Sanatorium Board of Manitoba

E II R

Issued June 1953
Coronation Year

SANATORIUM BOARD
OF MANITOBA

Operating

X-RAY SURVEYS

TRAVELLING TUBERCULOSIS CLINICS

CENTRAL TUBERCULOSIS CLINIC
Winnipeg

MANITOBA SANATORIUM
Ninette

DYNEVOR INDIAN HOSPITAL
Selkirk

BRANDON SANATORIUM
Brandon

CLEARWATER LAKE SANATORIUM
The Pas

Co-operating with

St. Boniface Sanatorium

King Edward Memorial Hospital

and Other Agencies

Report for the Year
1952

WINNIPEG, MANITOBA

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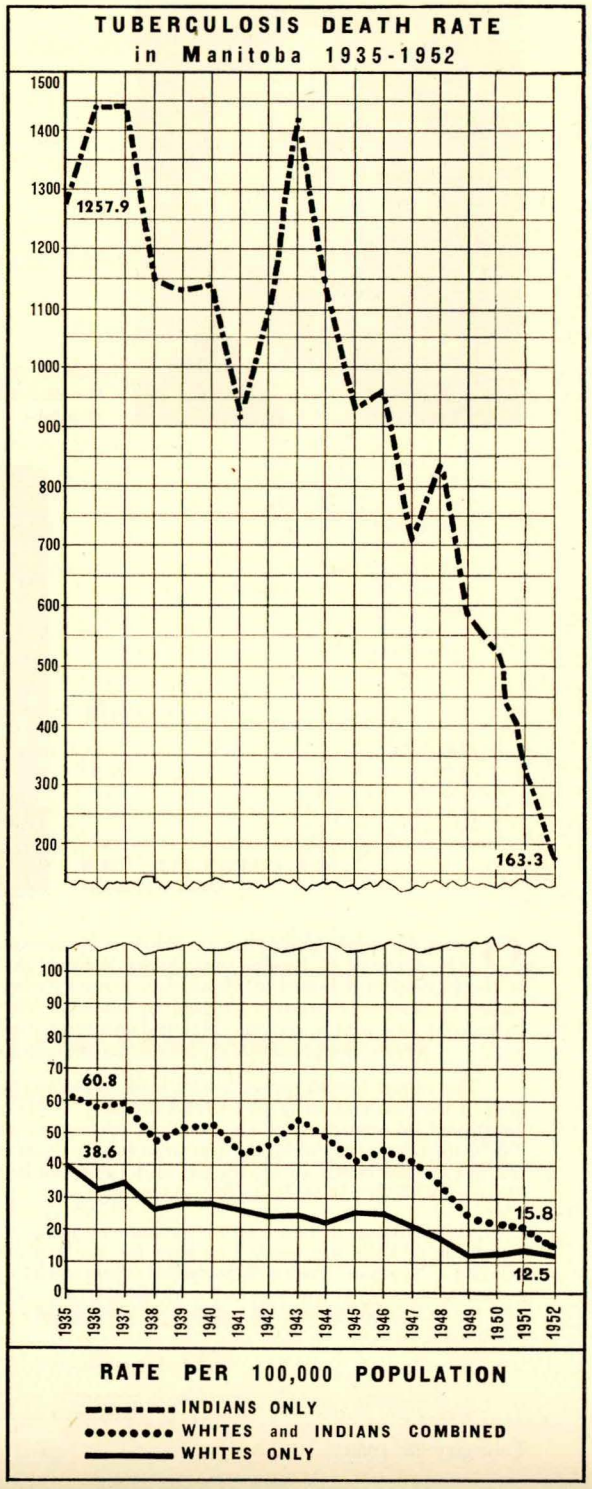
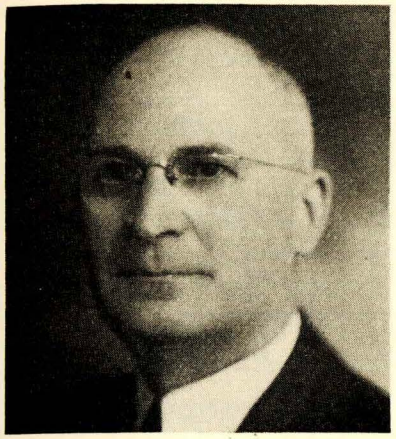
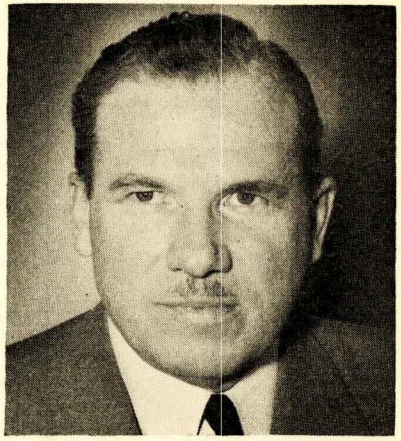
The Problem

	1942		1952
CASES under supervision in Manitoba	4,492		4,644
EXAMINATIONS	17,072		280,688
NEW CASES diagnosed			
Active 534		552	
Inactive 228		367	
	762		919
DEATHS	336		123





HON. F. C. BELL
Minister of Health and Public Welfare
Manitoba.



M. R. ELLIOTT, M.D., D.P.H.
Deputy Minister.

One of the most gratifying experiences in assuming the portfolio of Minister of the Department of Health and Public Welfare is to learn in some detail of the work of the Sanatorium Board of Manitoba. Our Province is fortunate indeed in having the battle against tuberculosis directed by such an able and enthusiastic voluntary body supported by a highly skilled, loyal and energetic staff. Their record of accomplishment is one of which every citizen of Manitoba can be proud.

The report herein presented indicates ever increasing progress towards the ultimate goal of the eradication of this dread disease. This has been made possible only by the continued co-operation of the medical profession and the public in all walks of life. The tremendous improvement shown in tuberculosis rates amongst our Indian population reflects special credit to the Board and the splendid co-operation shown by the Indian Health Services of the Federal Government.

But so long as new cases continue to be found amongst our people and many hundreds of beds are needed to care for the sick, our vigorous program must not be relaxed. Years of effort still lie ahead. The work of the Sanatorium Board of Manitoba commends itself to the support and assistance of every citizen of our Province to the end that this disease will no longer extract its deadly toll from our young and growing population.

F. C. BELL,
Minister of Health and Public Welfare.

February 25, 1953.

SANATORIUM BOARD OF MANITOBA - 1952

Executive

Chairman	Mr. D. L. Mellish
Vice-Chairman; and Chairman, Finance Committee	Mr. Wm. Whyte
Chairman, Administration Committee	Mr. J. W. Speirs
Chairman, Brandon Sanatorium Committee	Mr. J. N. Connacher
Chairman, Dynevor Indian Hospital Committee	Mr. C. E. Drewry
Chairman, Clearwater Lake Sanatorium Committee	Mr. R. H. G. Bonnycastle
Honorary Solicitor	Mr. I. Pitblado, Q.C.

Honorary Life Members

Mr. T. R. Deacon
Mr. W. H. French
Mr. G. W. Northwood
Mr. A. K. Godfrey

Statutory Members

Representing the Provincial Department of Health and Public Welfare	Hon. Ivan Schultz, Q.C.* Dr. M. R. Elliott Dr. C. R. Donovan Mr. G. D. Iliffe, C.A. Mr. W. T. Graham
As Municipal Commissioner	Hon. E. Prefontaine
Representing Union of Manitoba Municipalities	Mr. R. Barrett Mr. Oswald McKay Mr. Jos. LaRoche
Representing St. Boniface Sanatorium	Dr. A. C. Sinclair
Representing King Edward Memorial Hospital	Dr. J. A. Hildes
Representing City of Winnipeg	Mr. J. R. McInnes

Elected Members

Dr. J. D. Adamson	Mr. J. N. Connacher	Mr. D. L. Mellish
Mr. R. L. Bailey	Mr. H. T. Decatur	Dr. A. F. Menzies
Mr. R. K. Berry	Mr. C. E. Drewry	Dr. Ross Mitchell
Mr. R. H. G. Bonnycastle	Mr. H. A. Greeniaus	Mr. I. Pitblado, Q.C.
Mr. F. Boothroyd	Mr. Stanley M. Jones	Mr. J. W. Speirs
Mr. G. Collins	Mr. R. McMillan	Mr. Wm. Whyte

Executive Director and Secretary-Treasurer

T. A. J. Cunnings

Auditors

Riddell, Stead, Graham and Hutchison

ST. BONIFACE SANATORIUM

Advisory Board 1952

Chairman — Mr. Justice J. T. Beaubien
Mr. E. Cass
Mr. A. Monnin
Mr. G. P. Jessop
Mr. Noel Vadeboncoeur
Mr. E. Duha

Winnipeg Municipal Hospitals

KING EDWARD MEMORIAL HOSPITAL

Commissioners 1952

Mr. Peter Cornes (Chairman)
Ald. George E. Sharpe (Vice-Chairman)
Mr. A. J. Roberts
Ald. H. V. McKelvey
Ald. Peter Taraska

*Succeeded by Hon. F. C. Bell, Nov. 7, 1952.

MEDICAL STAFF, 1952

EDWARD LACHLAN ROSS, M.D.

Medical Director

D. L. SCOTT, M.D.

Assistant Medical Director

PREVENTIVE SERVICES
(Central Tuberculosis Clinic, Travelling Tuberculosis Clinics and Surveys)

Medical Superintendent — DR. D. L. SCOTT
Physicians — DR. D. F. MCRAE; DR. S. L. CAREY

MANITOBA SANATORIUM

Medical Superintendent and Chief Surgeon — DR. A. L. PAINE
Assistant Surgeon — DR. W. ZAJCEW
Medical Assistants — DR. F. P. HULKE; DR. PAUL MARI; DR. O. SOBEL

DYNEVOR INDIAN HOSPITAL

Medical Superintendent — DR. W. W. READ

BRANDON SANATORIUM

Medical Superintendent and Surgeon — DR. A. H. POVAH
Medical Assistant — DR. C. L. HSU
Medical Assistants (Interne) — DR. W. SHAHARIW; DR. U. V. QUINT

CLEARWATER LAKE SANATORIUM

Medical Superintendent — DR. S. L. CAREY
Medical Assistants (Internes) — DR. E. C. MUEHLENBECK; DR. T. MISHIMA

St. Boniface Sanatorium

Medical Director and Thoracic Surgeon — DR. A. C. SINCLAIR
Assistant Medical Director — DR. V. J. HAGEN
Senior Physicians — DR. F. KOZIN; DR. E. GEDGAUDAS

King Edward Memorial Hospital

Medical Director, Municipal Hospitals — DR. J. A. HILDES
Physicians — DR. M. H. CAMPBELL; DR. A. J. W. ALCOCK; DR. J. A. MACDONNELL

MEDICAL CONSULTANTS, 1952

Sanatorium Board of Manitoba

Radiology — R. A. MACPHERSON, M.D., C.M.
Orthopedics — A. GIBSON, M.D., M.A., M.B., Ch.B., F.R.C.S., F.R.S.E.; HENRY FUNK, M.D., B.A., Ch.M., F.R.C.S. (C)
Urology — H. D. MORSE, M.D., C.M., F.R.C.S. (C); (Brandon) R.P. CROMARTY, B.A., M.Sc., M.B., M.D.
General Surgery — (Brandon) H. S. EVANS, M.D., F.R.C.S. (Edin.) F.R.C.S. (C)
Ear, Eye, Nose and Throat — (Brandon and Ninette) R. O. MCDIARMID, M.D.
Anaesthesiology — D. C. AIKENHEAD, M.D., L.R.C.P. and S. (London), R.C.P.S. (C)
Dentistry — (Ninette) J. L. DICKSON, D.D.S.

and

Honorary Attending Staff, Winnipeg General Hospital

St. Boniface Sanatorium

Medicine — J. D. ADAMSON, M.D., B.A., M.R.C.P., F.R.C.P.
Orthopedics — HENRY FUNK, M.D., B.A., Ch.M., F.R.C.S. (C)
Urology — A. C. ABBOTT, B.A., M.D., C.M., F.R.C.S. (C)
Bronchoscopy — D. S. MCEWEN, B.A., B.Sc., M.D.
Dentistry — W. A. WEIR, D.D.S.; J. M. BENSON, D.D.S.; T. J. COOK, D.D.S.

and

Honorary Attending Staff, St. Boniface Hospital

King Edward Memorial Hospital

Chest Surgeon — M. B. PERRIN, M.D., F.R.C.S. (Edin.) (C)
Orthopedics — DUNCAN CROLL, M.D., C.M., F.A.C.S. (American.); C. HOLLENBERG, M.B.E., M.D., F.R.C.S. (Eng.) (C)
Radiology — F. G. STUART, M.D.
Pathology — O. C. TRAINOR, M.D.; A. SCHABERG, M.D.
Dentistry — R. H. SNYDER, D.D.S.
Biochemistry — M. H. FERGUSON, B.Sc., Ph.D. (Edin.)

and the

Consultant Staff, Municipal Hospitals, Winnipeg

Medical Advisory Committee

Chairman, DR. ROSS MITCHELL

DR. J. D. ADAMSON	DR. J. DOUPE	DR. W. J. WOOD
DR. L. G. BELL	DR. J. A. HILDES	DR. M. B. PERRIN
DR. M. BOWMAN	DR. M. S. LOUGHEED	DR. A. H. POVAH
DR. R. G. CADHAM	DR. R. A. MACPHERSON	DR. W. W. READ
DR. M. H. CAMPBELL	DR. DOUGALD MCINTYRE	DR. E. L. ROSS
DR. S. L. CAREY	DR. A. F. MENZIES	DR. D. L. SCOTT
DR. C. R. DONOVAN	DR. A. L. PAINE	DR. A. C. SINCLAIR

NON-MEDICAL SENIOR STAFF, 1952

	SUPERINTENDENTS OF NURSES	BUSINESS OFFICERS	CHIEF ENGINEERS
ium Board Manitoba	.....	John Mack (*Chief Accountant*) Edward Dubinsky (*Administrative Asst.*)	.....
nent Tuberculosis	Miss Jessie Hill, R.N.	F. A. Day (*Acct.*)	.....
ba Sanatorium	Miss V. W. Farquharson, R.N. Miss E. A. Buchan, R.N. (*Instructor in Nursing Education*)	N. Kilburg (*Business Manager*) W. Bradford (*Accountant*) W. B. Stewart (*Purchasing Agent*)	J. R. Scott
Indian Hospital	Miss A. Stefanson, R.N.	.....	.....
n Sanatorium	Mrs. I. A. Cruikshank, R.N.	G. R. Gowing (*Business Manager*) R. B. Scott (*Accountant*)	R. N. Newman
ter Lake orium	Miss D. Ellis, R.N.	C. C. Christianson (*Business Manager*) Edward Dubinsky (*Accountant*) (*To December, 1952*)	P. E. Johnston

St. Boniface Sanatorium

SUPERIOR ..... Rev. Sr. Eva LaPierre, R.N.
1ST ASSISTANT ..... Rev. Sr. Ruth Gettis, R.N.
2ND ASSISTANT ..... Rev. Sr. Gilberte Tetrault, R.N.
CHAPLAIN ..... Right Rev. Mgr. L. Primeau

Rev. Sr. M. Pilon, B.A., R.N. (*Director of Nursing*) Rev. Sr. B. Patry, R.N. (*Night Supervisor*)	Rev. Sr. V. Rheaume (*Sec. Treasurer*) Rev. Sr. G. Tetrault (*Purchaser*)	N. Pelletier

King Edward Memorial Hospital

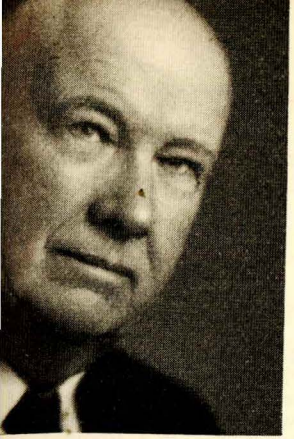
SECRETARY AND MANAGER ..... John M. McIntyre
ASSISTANT SECRETARY AND MANAGER ..... Arthur Hodgkinson

Miss L. M. Shepherd, R.N. (*Superintendent of Nurses*) Miss V. Cockburn, R.N. (*Asst. Supt. of Nurses*) Mrs. Margaret Thorne (*Superv'r T.B. Dept.*)	.....	Ray Bonsey

tion	**Travelling Tuberculosis Clinics and Surveys**	Organizer, Community Surveys ... Wm. L. Rutledge, Ph.D. Organizer, Industrial Surveys ... J. J. Zayshley, R. T.
ployment	**Rehabilitation**	E. G. Metcalfe, B.A. (*Director of Rehabilitation*)
ls	**Central Tuberculosis Registry**	Miss Elsie J. Wilson, R.N (*Supervisor*)

NON-MEDICAL SENIOR STAFF, 1952

RADIOGRAPHERS	LABORATORY TECHNICIANS	TEACHERS	OTHERS
W. J. Anderson, R. T.	.....	.....	Mrs. J. L. Morrison (*Sec. to Exec. Dir.*) Miss Nan T. Chapman (*Supervising Dietician*)
E. W. Ackroyd, R.T.	H. Daneleyko, R.T.	.....	Miss E. L. McGarrol (*Sec. to Med. Supt.*)
Wm. C. Amos, R.T.	J. M. Scott, R.T.	Miss M. E. Busch Miss Hazel Carlson Miss G. Manchester Miss Ruth Davidson (*Occup'l Therapist*) Miss M. E. Johnston (*Homemaking Instruc.*) Miss R. LeWarne	Miss G. M. Wheatley (*Sec. to Med. Supt.*) Miss P. Young (*Prac. Asst. to Dtcn.*) F. J. Rodwell (*Laundry Foreman*) Mrs. L. Paradoski (*Secretary*)
F. H. Gibson, R.T.	Miss L. E. Delamater, R.T.	Miss M. Morris (*Craft Instructor*) Miss C. Fraser Miss Nellie Kuzyk	Miss G. M. Hutton (*Sec. to Med. Supt.*)
John Kaczoroski, R.T.	Mrs. A. Muehlenbeck Miss P. M. Sismey	Miss A. Marion Mrs. P. Hill, M.A.	Miss M. L. Baudru (*Sec. to Med. Supt.*) R. B. Lock (*Laundry Foreman*)
Rev. Sr. L. Blais, R.T., B.A., R.N. (*O.R. and X-ray Supervisor*)	Rev. Sr. L. Blais, R.T., B.A., R.N. (*Lab. Supervisor and Pharmacist*)	Miss E. G. Swatland, R.N. (*Occup'l Therapist*) Miss J. Molin (*Teacher-Adult Pts.*) Miss R. A. DesRosiers (*School Teacher*)	Rev. Sr. A. Boulet (*Main Kit. Super.*) Mrs. H. Pietuchow (*Soc. Worker*) Mrs. I. F. Bright (*Dietician*) Miss Ivy Hodgkins, R.N. (*Chief Housekeeper*)
Miss M. T. Briggs Mrs. M. Birtle	Miss R. V. Moreton	Miss G. Motheral (*Teacher-Occup'l Therapist*)	T. G. Kane (*Laundry Foreman*) D. Donaldson (*Head Gardener*)
Alex. Roh, R.T. (*Supervising Radiographer*)	.....	.....	Miss G. H. Bowman (*Secretary*) Mrs. Thérèse Fraser (*Secretary*) Miss Gladys McGarrol (*Senior Statistical Clerk*)



D. L. MELLISH

REPORT OF THE CHAIRMAN

For the year ended December 31, 1952.

GENTLEMEN:

This is the forty-second annual meeting of the Sanatorium Board of Manitoba and I have a great deal of pleasure in welcoming both the members of the Board and the visitors who are with us today.

Two weeks ago the Board heard detailed reports from the Chairman of the Finance Committee, Mr. Whyte; the Chairman of the Medical Advisory Committee, Dr. Adamson; the Medical Superintendent of Preventive Services, Dr. Scott; the Medical Superintendents of the Sanatoria operated by the Board; and the Medical Directors of the St. Boniface Sanatorium and the Winnipeg Municipal Hospitals, respectively.

All these reports have been distributed to members of the Board and in somewhat condensed form most of them will appear in our published Annual Report. I am sure that all who heard them, or have had an opportunity to study them, cannot help but be impressed with the scope and magnitude of the Tuberculosis Control Program that continues to be aggressively carried forward under the Board's direction.

THE BOARD

At present, the Board consists of thirty members of whom eighteen are elected and twelve are Statutory members, and all of whom contribute their services on a voluntary basis. I should like particularly, at this time, to welcome two new members of the Board, The Honorable F. C. Bell, Minister of Health and Public Welfare and the Honorable R. D. Turner, Provincial Treasurer. We look forward with pleasure to the benefit of their advice and assistance in carrying on the Board's affairs.

A continuous review of all aspects of the Board's business is provided through its seven standing committees, acting under their respective chairmen. During 1952 there were forty-five meetings of the Board or its Committees. I should like to express my sincere appreciation for the able and thoughtful attention which the Committee Chairmen and members have given to our affairs throughout the year.

THE PROGRAM

Under the provisions of the Tuberculosis Control Act the Board is responsible for the care of those citizens who require treatment for tuberculosis, and the establishment of all possible measures to prevent or minimize the development of the disease in this province. No effort has been spared to fulfill these responsibilities. The program is continually under critical review to utilize every advance in medical knowledge, and apply all recognized control measures vigorously and, at the same time, economically. A comprehensive outline of these measures will be given to you in other reports and I shall not try to deal with them here.

The Board has continued to carry out a planned program of improvement in the Sanatorium buildings and equipment, to ensure that facilities permit a high standard of treatment service.

FINANCE

The entire cost of the treatment of tuberculosis is met from public funds; there is no charge made to any individual patient for either the diagnosis or treatment of tuberculosis.

On the other hand the preventive services and the rehabilitation services are mainly financed from contributions to the Christmas Seal Fund and through the Associated Canadian Travellers, with some assistance from the National Health Grants for new and extended services.

Again this year the National Health Grant has continued to play an important part in advancing the Tuberculosis Control Program, making possible a great deal of work that could not be done without this source of financial assistance. The value of these grants by the Government of Canada in aiding the Tuberculosis Control Program in this province is evident when we consider that since their inception in 1948 a total of $564,182.00 has been expended from this source to extend and improve preventive, treatment and rehabilitation services. The Board is very grateful for the co-operation and assistance of the Minister and Officers of the Department of National Health & Welfare at Ottawa in dealing with Projects submitted by the Board through the Provincial Minister of Health and Public Welfare.

CONTRIBUTED FUNDS

During 1952 contributions to the Christmas Seal Fund totalled $120,086.00. In addition the Associated Canadian Travellers turned over to the Board $16,350.00 to assist in financing the preventive campaign. All these contributed funds are used solely for preventive, educational and rehabilitation services. Although in recent years, some assistance for preventive measures has been available through the National Health Grants, the main support for this work continues to be the voluntary contributions of citizens to the Christmas Seal Fund and the Associated Canadian Travellers T.B. Fund.

Apart from the contributions to the Christmas Seal Fund, the Board from time to time receives special gifts from interested people or bequests from the estates of those persons who wish to leave a memorial that will give lasting benefit to the patients at Ninette. These gifts are maintained in an Endowment Fund which is used from time to time to fulfill special needs at Manitoba Sanatorium, adding greatly to the welfare of the patients and providing things which cannot be financed from the ordinary operating revenues of the institution. The donors of five hundred dollars or more are listed on a permanent Memorial Page in our published Annual Report. We are deeply appreciative of those who have remembered our work in this way.

RESULTS

The Medical Director, Dr. Ross, will give you a full report on the results of the work during the past year. I will only mention that the death rate has been reduced by approximately twenty-five percent as compared to 1951—a great achievement, indeed. This indicates in some degree the effectiveness with which case finding and treatment measures are being carried out. The number of deaths is decreasing. Nevertheless the number of new cases being discovered each year continues to be far too great to permit any complacency or slackening of our efforts.

APPRECIATION

The Board has continued to have the loyal service of a staff deeply devoted to our work. Each one, in whatever department employed, makes a valued contribution to the total effort and we are deeply appreciative of the interested and unstinting service they have given throughout the year.

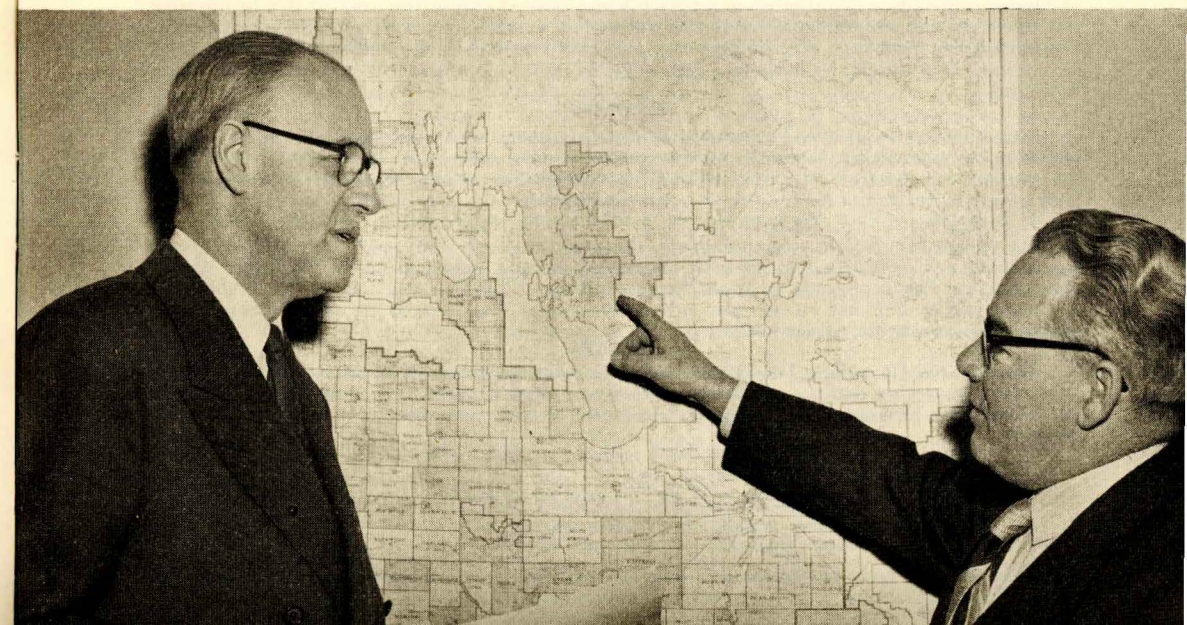
In closing I should like to record our grateful thanks for the continued confidence and support of the Minister of Health and Public Welfare and his colleagues in the Provincial Government; for the continued support of the Union of Manitoba Municipalities; and for the pleasant relations we continue to enjoy with officers of the Winnipeg Health Department and the Municipal Hospitals and with the Reverend Sister Superior, the Medical Director and the Advisory Committee of St. Boniface Sanatorium.

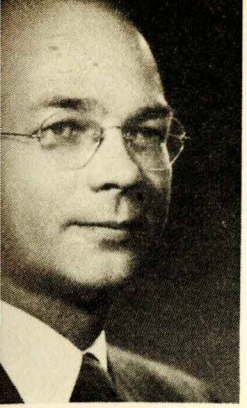
Respectfully submitted,

D. L. MELLISH,

Chairman of the Board.

With the continued reduction in the tuberculosis death rate, the Sanatorium Board is making a special case finding effort in those areas of the province in which the incidence of the disease is greater than average. Here Dr. Ross, Medical Director, reviews the x-ray survey plans with Dr. G. J. Wherett, Executive Secretary, Canadian Tuberculosis Association, Ottawa.





J. CUNNINGS

REPORT OF THE EXECUTIVE DIRECTOR

I HAVE pleasure in presenting to you an administrative summary of the operations of the Sanatorium Board of Manitoba for the year ended December 31st, 1952.

ASSETS AND LIABILITIES

At December 31st, 1952, assets held by the Board, including Special Funds, but not including buildings and equipment at Brandon, Clearwater and Dynevor owned by the Government of Canada and not carried in the Financial Statements of the Board, totalled $1,635,627. Liabilities, not including reserves, totalled $233,347. Bank loans, at the year end totalled $37,395 of which $20,076 were temporary advances in connection with Sanatoria operated for the Department of National Health and Welfare, and $17,318 an advance in connection with disbursements under the National Health Grant, pending reimbursement from the Provincial Department of Health and Public Welfare.

Combined operations of Manitoba Sanatorium and the Central Tuberculosis Clinic showed an excess of income over expenditure for the year of $680 and net working capital showed an increase of $4,614.

CAPITAL EXPENDITURES

A planned program of modernization continued at Manitoba Sanatorium. Through a capital grant from the Provincial Government re-surfacing of roofs with asphalt shingles at Ninette was continued from the previous year at a cost of $6,324. This completes the shingling of all the larger Sanatorium buildings. A much-needed program of improvement in the nurses' home was inaugurated, the second floor being completely re-decorated and re-furnished at a cost of $10,032. The provision of ten additional infirmary beds through discontinuance of use of the infirmary diet kitchens, and the elimination of the infirmary kitchen along with a complete modernization of the food services was commenced, the work being carried over into 1953. Total estimated cost of this project is $50,000. At Brandon Sanatorium air conditioning was installed in the operating room at a cost of $1,775. A linen room addition was completed at a cost of $3,013, and other improvements were made in the equipment of the institution. At Clearwater Lake Sanatorium a Medical Superintendent's residence was constructed at a cost of $13,624 and accommodation for seventeen domestic staff employees was built at a cost of $19,698, freeing a number of hospital beds that it had been necessary to utilize for staff purposes up to this time. Two of the former army buildings that have been used as staff houses were moved to a new location providing central heating, water and sewer facilities, the buildings were placed on adequate foundations and remodelled to bring them up to satisfactory standard at a cost of $9,837. A great many improvements were completed at Dynevor including installation of a tray lift and centralizing of the food service to improve the efficiency and accommodation at the institution, at the same time providing three additional beds for patients. All the property and equipment in each institution has been fully maintained with repair, replacement, improvement and redecoration being carried out where indicated.

INCOME

The basic rate structure for tuberculosis treatment was unchanged during the year. However, to meet rising costs the Provincial Government made a special grant of fifty cents per patient day towards the cost of treating patients for whom Statutory Grant applies. This grant is distributed by the Board to all tuberculosis treatment institutions.

It is significant that, for patients who are Manitoba responsibilities, the total number of treatment days is now reducing each year. In 1949, the peak year, there were 221,406 treatment days; in 1952 there were 204,003 treatment days, a reduction of 17,403 in the three-year period. This represents an annual saving of some $70,000 in treatment cost which might be considered a dividend on our preventive campaign. The figures are also extremely significant in planning for future needs.

COSTS

During 1952 the steady increase in costs that has been apparent in recent years appeared to level off somewhat and the per diem cost increase noted in three of the five Sanatoria which we operate was brought about by general increases in salary and certain special maintenance expense.

TREND OF PER DIEM COSTS — 1952

Brandon Sanatorium—decrease 11c per patient day to $4.74
Central Tuberculosis Clinic—decrease 16c per patient day to $5.979
Clearwater Lake Sanatorium—increase 60c per patient day to $5.29
Dynevor Indian Hospital—increase 27c per patient day to $5.09
Manitoba Sanatorium—increase 30c per patient day to $4.969

The per diem costs shown are gross figures, with income from maintenance and quarters provided for staff being shown on our statements as revenue.

The total operating expenditures for treatment and preventive services in the institutions and departments operated directly by the Board amounted to $1,565,179 in 1952. Of this expenditure $867,552 was for salaries.

Reversing the trend of recent years there was a reduction in the average raw food cost of ½c per meal in 1952. During the year the Board expended $291,345 for food and served approximately 1,078,000 meals to patients and resident staff.

Total expenditures for fuel and heating services at $54,120 showed a reduction of $1,018 compared to the previous year. Laundry services cost $49,894, an increase of $4,291 over 1951. The Diesel electric plant which we operate at Clearwater Lake Sanatorium continues to supply both the hospital and the airport with power. During the year 721,600 kilowatt hours were produced at an average cost of 3.5c per kilowatt hour.

INVENTORIES

At December 31st, 1952, supplies on hand including commissary stores, engineering and maintenance supplies, fuel, diesel fuel oil, bunker fuel oil, and miscellaneous supplies, totalled $118,111, an increase of $5,876 over the year previous. All inventories are valued at cost and all the materials are in current demand.

NATIONAL HEALTH GRANTS

The portion of the National Health Grant available for tuberculosis control in Manitoba for the fiscal year 1952-53 is $240,542. During the calendar year ended December 31st, 1952, expenditures for the extension and improvement of the treatment, preventive and rehabilitation services under approved projects totals $201,900. The larger projects included the following:

Assistance to Central Tuberculosis Clinic	$ 5,805
Streptomycin and Other Antibiotics	24,679
Extension of Rehabilitation Service	11,369
Assistance to St. Boniface Sanatorium	7,166
Chest X-rays on admissions to General Hospitals	88,215
Staff, Sanatorium Board of Manitoba	11,460
Industrial X-ray surveys	10,272
Extension of Travelling Clinics	4,177
Assistance to Manitoba Sanatorium	32,122

These National Health Grants have been of inestimable value in contributing to the facilities for the early diagnosis and treatment of tuberculosis in Manitoba. All the money has been expended to provide new and modern medical and surgical equipment; to take full advantage of the new chemotherapeutic agents that have been developed in the past four years; and to develop new and broader methods of attack on tuberculosis that will have a cumulative effect on the rate at which it is reduced. The aim of all concerned with the administration of these grants has been their most effective use to accomplish the greatest result, and the unfailing co-operation and assistance of administrative officers both of the Provincial Department of Health and Public Welfare and the Department of National Health and Welfare at Ottawa is gratefully acknowledged.

INSURANCE

Fire insurance on buildings and equipment at Manitoba Sanatorium and the Central Tuberculosis Clinic was continued in the amount of $1,070,000. Supplemental perils are covered in this insurance. A Fleet policy is carried covering all motor vehicles providing, in addition to the usual loss or damage to the insured vehicles, legal liability for bodily injury or death of $50-100,000 and legal liability for damage to property of $10,000. Public liability and Property Damage insurance only is carried on the vehicles at institutions operated for the Federal Government. An All-Risks policy is carried on the mobile x-ray and related equipment. Public and Employer's Liability insurance covering all the Sanatoria are carried in the amounts of $50-100,000. Comprehensive Dishonesty, Theft and Forgery insurance, including minimum Fidelity coverage on each employee of $2,500 continues in effect. Boiler insurance is carried on the steam equipment at Ninette.

PERSONNEL

On December 31st, 1952, the Board had 530 employees, an increase of two during the year. The only group in which difficulty was encountered in obtaining an adequate supply of staff was among the Registered Nurses and arrangements were made at the end of 1952 to bring out four Registered Nurses from Great Britain. These now are stationed at Manitoba Sanatorium.

The Group Insurance Plan, established for the benefit of members of the staff and their dependents in 1950, continued to function satisfactorily. At the end of the year 340 members of the staff were insured in the Plan for a total of $527,000 of Life Insurance and $6,057 of weekly accident and sickness indemnity; 323 were covered for reimbursement of surgical expense up to a maximum of $200 for any one operation; and 112 members of the staff carried surgical coverage for their dependents. During the year 61 employees had claims for weekly indemnity benefits, 54 for surgical benefits and there were no death claims. All claims are dealt with promptly and the insurance is proving of great value to members of the staff.

Through a Retirement Annuity contract with the Department of Labor, Annuities Branch, a pension plan was established for permanent employees of the Board in 1946. During the year there was a net increase of $6,862 in the funds on deposit making a total of $125,558.

Payment by the Board on account of service prior to August 1st, 1946	$ 26,985
Payments by the Board on account of service subsequent to August 1st, 1946	42,450
Payments by Employees	56,123
Total	$125,558

During the twelve months ended July 31st, 1952, which is the anniversary of the contract, eight employees retired or left the service of the Board and received paid-up personal annuity contracts with a present value of $9,452.

An outstanding characteristic of the responsible officers and employees in all institutions and departments is their sense of dedication to the improvement of the service and the advancement of every aspect of the work. They have given fully of their talents and skills, each in his place contributing to another year of achievement.

APPRECIATION

In conclusion, may I express again my gratitude for the guidance and good counsel of the Chairman of the Board, and the Chairman and members of the several Administrative Committees. Their thoughtful consideration of the many plans and problems brought before them for direction and decision is deeply appreciated. I am sincerely grateful for the mutual confidence and cordial associations that continue to mark all relationships with the Medical Director and the medical officers of the Board; and with officials of the Provincial and Federal Governments, the officers of co-operating institutions, and with Department heads and staff.

Respectfully submitted,

T. A. J. CUNNINGS,
Executive Director and Secretary-Treasurer.

STATEMENT OF TREATMENT DAYS — TUBERCULOSIS SANATORIA

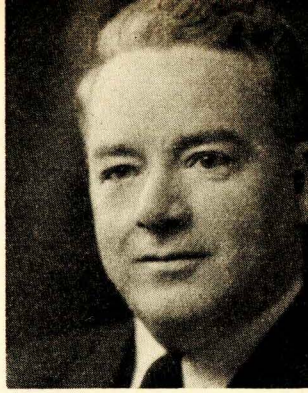
Province of Manitoba — Cities, Municipalities and Unorganized Territory	City of Winnipeg	City of Brandon	City of St. Boniface	City of Portage la Prairie	Unorganized Territory	Municipal Levy Area	Other	Total Treatment Days
Brandon Sanatorium	.....	.....	.....	.....	1,010	2,314	.....	3,324
Central Tuberculosis Clinic	3,952	24	131	281	2,621	5,895	.....	12,904
Clearwater Lake Sanatorium	.....	.....	.....	.....	3,189	168	.....	3,357
Dynevor Indian Hospital	.....	.....	.....	.....	1	.....	.....	1
King Edward Memorial Hospital	31,060	.....	189	.....	2,504	.....	407	34 160
Manitoba Sanatorium	13,106	3,409	429	1,621	16,262	42,671	.....	77,498
St. Boniface Sanatorium	15,713	377	2,524	890	21,055	32,161	39	72,759
	63,831	3,810	3,273	2,792	46,642	83,209	446	204,003

Govt. of Canada, Yukon Territory & Other Provinces	Dept. of Veterans Affairs	Dept. of National Health & Welfare	Depts. of Labour and Resources & Development	Dept. of National Defence	Yukon Territory	Reciprocal Agreements with Other Provinces	Paying Patients	Other	Total Treatment Days
Brandon Sanatorium	390	91,074	.....	.....	366	.....	.....	.....	91,830
Central Tuberculosis Clinic	609	1,149	.....	202	.....	606	55	.....	2,621
Clearwater Lake Sanatorium	37	54,247	.....	.....	.....	381	.....	.....	54 665
Dynevor Indian Hospital	.....	16,857	.....	.....	.....	.....	.....	.....	16,857
King Edward Memorial Hosp.	4,872	.....	.....	538	.....	620	.....	101	6,131
Manitoba Sanatorium	6,021	3,195	856	319	2,167	2,297	.....	.....	14 855
St. Boniface Sanatorium	3,306	19,643	405	.....	.....	4,944	.....	.....	28 298
	15,235	186,165	1,261	1,059	2,533	8,848	55	101	215,257

Total Treatment Days — 1952

Province of Manitoba—Cities, Municipalities and Unorganized Territory	204,003
Government of Canada, Yukon Territory and Other Provinces	215,257
	419,260

REPORT OF THE MEDICAL DIRECTOR



DR. E. L. ROSS

THE reduction and ultimate eradication of tuberculosis from Manitoba is the objective and the responsibility of the Sanatorium Board. All phases of the program to attain this end were continued vigorously during 1952, as I trust will be evident by the following report. Gains have been steady over the years but are particularly notable during the past five years, as shown by the marked reduction of the death rate. Broadly speaking, the Board's program is based upon the discovery of new cases of tuberculosis as early as possible, prompt and effective treatment, a sound and practical rehabilitation service, and the co-ordination of all three. In Manitoba in 1952, 312,849 free chest X-rays were taken, 1,200 beds in seven sanatoria provided 419,260 days treatment for tuberculosis, and educational, vocational and rehabilitation services were provided for patients in all sanatoria.

TUBERCULOSIS DEATHS

	Whites and Indians Combined		Whites		Indians	
	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths	Rate per 100,000	Total Deaths
1935	60.8	432	38.6	269	1,258	163
1940	50.3	369	27.7	203	1,140	166
1945	42.7	314	25.1	185	793	129
1946	44.6	324	25.1	183	848	141
1947	41.7	310	24.5	182	752	128
1948	38.0	288	19.7	149	754	139
1949	28.9	225	14.8	115	628	110
1950	22.8	181	12.8	102	438	79
1951	20.5	159	12.8	99	321	60
1952	15.8	123	12.5	95	163	28

The figures for 1952 are tentative.

The decrease in tuberculosis deaths is striking and the rate of 15.8 per 100,000 of population is the lowest ever recorded for Manitoba. A review of the above table is particularly interesting and gratifying. It is noted that only half as many White people died of tuberculosis in 1952 as in 1945, 95 compared to 186, and only about a third as many as in 1935. The drop in Indian deaths is phenomenal, being 110 in 1949 and only 28 in 1952, which is a decrease to one-fourth the number in three years and one-sixth that of 1940.

Earlier discovery of tuberculosis has accounted for gradual improvement, but the greatest reason for the marked drop during the past five years is more effective treatment by the newer drugs—Streptomycin and Isonicotinic Acid Hydrazide—and along with these a better understanding of the pathogenesis of tuberculosis and the timely use of surgery. Treatment is much more definitive and the outlook for the person developing the disease now is greatly improved.

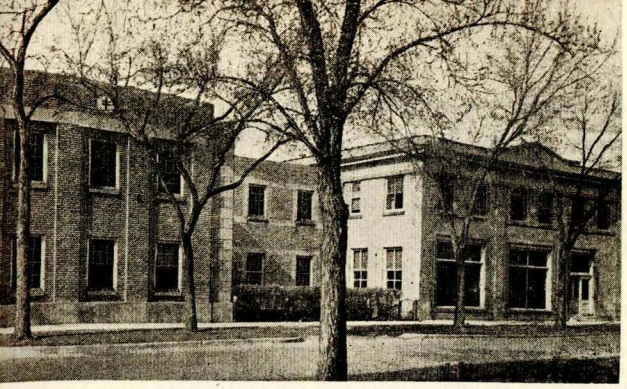
Gratifying as this is, the 123 deaths in 1952 is still a challenge which affords no complacency. Eighty-six were caused by pulmonary disease, ten non-pulmonary, and twenty-one both. Six died of tuberculous meningitis. A detailed study of the deaths is being made, mainly to determine the reason and also why twenty-six were not reported prior to death. Most of the 26 died in general hospitals and the diagnosis was established only by post mortem examination.

NEW CASES

Newly discovered cases of tuberculosis are classed as active or inactive and the total of both for 1952 was 686 for White people, compared with 806 in 1951. The decrease is in the inactive cases, which, although important to know about, are not nearly as significant as those with newly developed disease. It is a matter of concern that new active cases have increased from 333 to 368 and also that fewer had minimal disease and more moderately advanced. During the last few years and in spite of decreasing deaths, this same trend has been prevalent in Canada and the United States. There has been a shifting to older age groups, both for deaths and new cases, and to men more than women. Twenty-two per cent of the new active cases in 1952 were 50 years of age or over, and the ratio of men to women in this age group was three to one. The age and sex distribution is noted in the following graph.

New Diagnoses of Active Tuberculosis

Year	Whites Active T.B.	Indians Active T.B.
1940	438	147
1945	438	134
1946	514	180
1947	492	337
1948	496	535
1949	427	402
1950	364	239
1951	333	169
1952	368	182



Preventive Services Headquarters
Central Tuberculosis Clinic

Prevention

PREVENTIVE SERVICES

From the Report of the Medical Director

TUBERCULOSIS is an infectious disease caused by a specific germ, the tubercle bacillus. There are other contributary etiological factors but under any circumstances there can be no disease without the germ. It is not the known cases that spread infection but mainly those who are unaware of having tuberculosis. Preventing tuberculosis is therefore based on discovering the disease early and before it is infective, and in the light of our present knowledge the X-ray is the only method of early detection.

CASE-FINDING

The following figures show the extent of the case-finding program in Manitoba with X-ray examinations for the year totalling 312,849.

Examinations in Manitoba at Clinics, Hospitals, and Surveys 1944-1952

Year	Stationary Clinics	Travelling Clinics	Hospital Admission X-rays	Surveys	Total
1944	11,332	4,765		43,323	59,420
1945	9,302	5,562		50,520	65,384
1946	12,908	8,740		108,742	130,390
1947	10,457	6,084		259,271	275,812
1948	9,752	5,385		235,446	250,583
1949	10,636	4,515	12,722	222,919	250,792
1950	10,440	5,205	47,774	170,402	233,821
1951	10,353	4,055	64,181	240,110	318,699
1952	11,325	5,566	72,872	223,086	312,849
	96,505	49,877	197,549	1,553,819	
Grand Total, 1944 to 1952					1,897,750

Survey chest films taken in 1952 was 223,086, which figure does not include 72,872 hospital admission films.

Rural and Suburban Municipalities	170,620
Winnipeg High Schools	8,244
Industrial	32,946
City Hall Unit and Pre-employment	11,276
Total	223,086

There were 17,000 fewer survey X-rays in 1952 than during the previous year, which is accounted for by concentrating on areas more sparcely populated but with a higher than average incidence of tuberculosis. Practically all of rural Manitoba is covered by X-ray surveys every two years. The year 1953 will be particularly heavy because 15 low incidence municipalities missed two years ago will be included and also Ward two in Winnipeg with 77,000 population, and St. Boniface. Organizing these surveys, as can be appreciated, involves detailed planning and success is dependent upon local enthusiasm and promotion. Surveys and their organization are of educational value concerning health generally and tuberculosis particularly, and are no doubt an important factor in the continued and increasing sale of Christmas Seals. I would like to pay tribute to Mr. W. L. Rutledge, who is responsible for the detail organization of the surveys and who in this capacity held over 200 public meetings during the year. I also wish to thank the hundreds of people throughout the province who voluntarily assisted with the surveys.

Surveys discovered 56 new active cases of tuberculosis, which is only one in 3,219 X-rayed. This is the same incidence as the year before and with positive findings being so low the question of the value of surveys in relation to cost has been given considerable thought the last two years. However, delayed diagnosis is costly, not only for treatment but because countless others may be infected, and early tuberculosis can only be found by X-raying well people. It is difficult to curtail surveys because of public demand, but we know where most tuberculosis is developing and are intensifying clinics in these areas.

Sixty-seven per cent of the active cases discovered by surveys had minimal disease, 23% moderately advanced and only 10% far advanced, compared with 27% with advanced disease among all the new cases reported for the year. Even with an annual coverage of over one-third of the population, only 15% of the new active cases were found by surveys. The vast majority are diagnosed by our other clinics or by physicians, which means after symptoms have developed. These facts emphasize the importance of a 100 per cent attendance at community surveys and suggest that those who may be doubtful about their health stay away. Even with the provision of a free chest X-ray service for most communities every two years, it must be recognized that the findings are as they happen to be at that time and that tuberculosis can develop into manifest disease in a relatively short time, even weeks.

Travelling chest clinics, unlike the survey units, are not intended to X-ray everyone in a community but, with a doctor in attendance, large X-rays are taken, often developed on the spot, and a consultation service provided. Those examined are mainly people suspected by their doctor of having tuberculosis or are known cases or contacts to be followed. These clinics have always been fruitful sources for new cases. During 1952, 103 clinics were held, many places monthly, and examinations totalled 5,566. Twenty-six new active cases were discovered and only two in an advanced stage.

As mentioned previously, certain areas of the Province, for the most part distant, poorer economically and predominantly metis in population, stand out as having a high morbidity and mortality. A special Federal Health Grant project has been developed to provide a more intensive travelling clinic service for these localities which are listed in the appended data.

Stationary Clinics are the out-patient clinics in each sanatorium and the Central Tuberculosis Clinic. The number of examinations by these services was 11,325, an increase of 1,000 compared to 1951, and 8,246 of these were at the Central Clinic. These clinics have been credited with diagnosing 147 new active cases, which is 40% of the total, so their important function is obvious.

Industrial and Pre-employment X-rays—The Winnipeg Health Department and the Sanatorium Board are co-operating in the Industrial X-ray survey program, the former organizing the work and the Board doing it—that is, providing X-ray equipment, X-ray films, technicians and medical staff to read and report on the X-rays. This has been an important development during the past two years and the splendid co-operation of the various business concerns is fully appreciated. In 1952, 32,946 employees of 713 business firms were X-rayed. The average attendance was 98.2%, which indicates the degree of interest and thoroughness of the planning. The Winnipeg Health Department operates an X-ray unit at the City Hall, which made 11,276 chest examinations in 1952, 4,487 of which were a requisite to employment. The Sanatorium Board's responsibility for tuberculosis control policy, since it is province-wide, includes Winnipeg, and the very low tuberculosis death rate in Winnipeg is a reflection of the co-operative and combined effort of the City Health Department and the Sanatorium Board. A more complete report of the Tuberculosis Control Division of the Winnipeg Health Department is appended.

ASSOCIATED CANADIAN TRAVELLERS

DURING 1952, the Winnipeg and Brandon Clubs of the Associated Canadian Travellers continued to give invaluable support to the preventive program of the Sanatorium Board of Manitoba. Each club arranged two series of amateur talent contests, one in the spring and one in the fall, which were broadcast on Saturday nights over radio stations CJOB in Winnipeg and CKX in Brandon. The two radio stations very generously contributed the time for these public-service broadcasts.

During the year, the Travellers turned over to the Board for the anti-tuberculosis campaign $16,350. Added to the amounts previously given, this makes a total of $191,574 contributed by the Travellers since they began their magnificent work against tuberculosis in 1945.

The thanks of the Sanatorium Board of Manitoba are extended to the Associated Canadian Travellers and to radio stations CJOB and CKX for their enthusiastic and wholehearted assistance, through which they are rendering a service of inestimable value to the people of Manitoba.

This mobile X-Ray unit is well-known throughout Manitoba. It provided 83,587 free chest X-Ray examinations in 1952.

Chest X-ray Program for General Hospital Admissions—Many years ago tuberculosis developing in nurses-in-training in General Hospitals was a special problem; in fact, we wrote one of the earliest medical publications on the subject. Efforts were first directed toward perfecting protective nursing techniques and finally it was realized that this hazard was created by the higher incidence of tuberculosis among people admitted to general hospitals. This group is a considerable proportion of the population—about one-eighth annually. The importance of identifying spreaders of infection among general hospital patients was then emphasized, and in 1949 a program was initiated to chest X-ray all patients admitted. This project has gradually expanded and now includes 49 hospitals, an increase of 18 in the past year and all with X-ray service.

During 1952, the 49 participating hospitals admitted 94,398 patients and 62,540 or 66.2% had admission chest films. Also, 6,242 out-patient and 4,090 hospital staff X-rays were taken, making a total of 72,872 chest films for this particular case-finding project.

It will be noted in the analysis that the percentage of admissions X-rayed in some hospitals is quite low, mostly rural, and is due to staff shortage. Each hospital submits a detailed report quarterly, which is carefully checked and reviewed, and those with a low X-ray percentage are asked for an explanation and urged to do better. Incidentally, the 66.2 percentage of hospital admissions X-rayed compares favorably with other provinces.

In-patients X-rayed	62,540
Out-patients X-rayed	6,242
Staff X-rayed	4,090
Total	72,872

Hospitals with over 1,000 annual admissions have equipment installed to take miniature chest films, which in the larger hospitals are interpreted by radiologists. In smaller hospitals standard sized films are taken and forwarded weekly to the Central Tuberculosis Clinic for reading. The followimg summary of tuberculosis and other abnormalities discovered is evidence of the value of this project:

1. Of the 62,540 patients X-rayed 66 or one in 947 had apparently active tuberculosis compared to one in 3,219 discovered by community surveys.
2. One in 383 had pulmonary tuberculosis of doubtful activity.
3. One in 221 had apparently inactive tuberculosis.
4. One in 236 were considered tuberculosis suspects.
5. Taking intc account all the above, one in 80 had evidence of past tuberculosis or deserved further investigation to rule out present disease.
6. The value of this project is not limited to the discovery of tuberculosis. One in 26, that is, 2,374, were considered to have some non-tuberculosis pulmonary abnormality.
7. A probable cardio-vascular abnormality was suggested radiographically in 3,293 or one in 19.
8. Of the 6,242 out-patients X-rayed 11 had probable apparently active tuberculosis. This project provides a convenient X-ray service in rural Manitoba for referral of suspects and follow-up survey films.
9. Regular X-ray examination of nurses and other ward staff is encouraged. Of the 4,090 X-rayed 3 had evidence of tuberculosis and 7 others were suspicious.

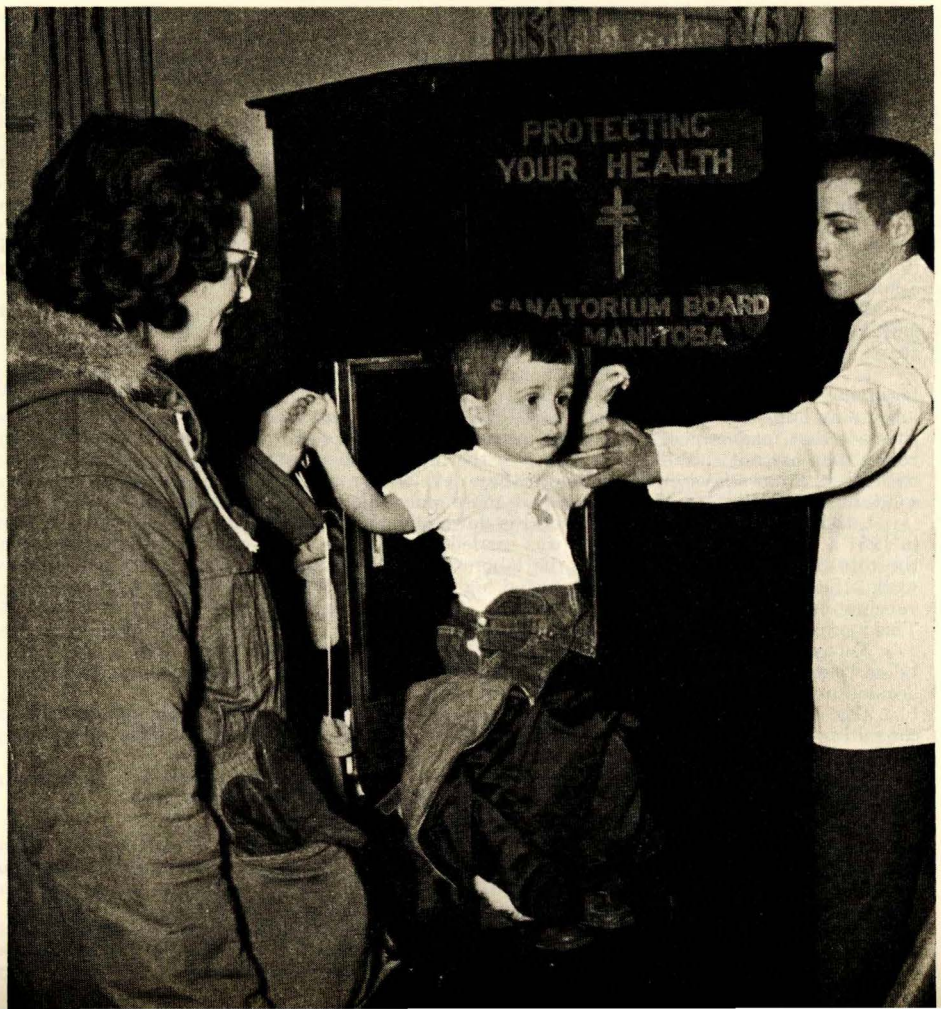
It is evident that this project provides a worthwhile addition to the tuberculous case-finding program. It also promotes a desirable relationship with the doctors and hospitals throughout the Province.

Tuberculin Testing—In Transcona, 1,015 school children were given tuberculin patch tests. Only 18 or 1.8% were positive. In an attempt to trace their source of infection, 69 household contacts were X-rayed and none had evidence of tuberculosis. It was difficult to get these contacts examined and our experience, not only at Transcona but also in Winnipeg, is that as far as case-finding is concerned it is doubtful if the effort is justified. During 1952, 436 school children at Neepawa and 304 in Nordale School, Norwood, were also tuberculin tested and three per cent were positive.

Vaccination with B.C.G.—Vaccination with B.C.G. so far has been confined to persons who have not been infected but because of their environment may be unavoidably exposed to infection. This group is comprised mainly of nurses and medical students and contacts of known tuberculous patients. During the year 629 were vaccinated, which is an increase of 68 over the previous year.

In countries in Europe and Asia where there is a high incidence of disease and infection, with little provision for isolation and treatment, vaccination with B.C.G. has been adopted on a mass basis. Our great aim is to prevent infection and in Manitoba up to the age of 16 only five per cent or less have a positive tuberculin test.

This young man is starting early in life to have his regular chest x-ray. Along with over 1,500 other civilian residents of Churchill, this lad and his mother were filmed in January, 1952.



D. L. SCOTT

Report of the Medical Superintendent Central Tuberculosis Clinic and Preventive Services 1952

CENTRAL TUBERCULOSIS CLINIC

TOTAL visits to the Central Clinic were 8,246 and are up by over 500 compared with 1951. There was a good turnover of patients admitted to the ward, as indicated by the number of admissions and discharges, and, although admissions were fewer, treatment days were up by over 1,000. Examinations totalled 6,966 and of these 2,282 were new and 4,684 were re-examinations of patients previously seen at the Central Clinic.

By various means the Central Clinic diagnosed 181 new cases of tuberculosis, an increase of 16 over the preceding year. After full investigation 153 of these were considered to be active cases, the remainder inactive; 96 of the 153 were cases of active pulmonary tuberculosis, and 59 had tubercle bacilli in sputum. In other words, 59 of the cases were in an active infectious state when first seen. It is of interest to note that the greatest number still falls in the age group 25-29, but, contrary to general opinion, there were 19 cases over 60 years of age and of this number 7 were over 70 years of age. Tuberculosis is no respecter of persons, young or old!

ADMISSIONS AND DISCHARGES

Admissions totalled 415. Re-admissions, which usually mean relapse, continue for various reasons to be too high. There were 136 of these last year. Twenty-two patients were discharged against advice but a number of these were patients who went home to settle their affairs and over-stayed their leave. Even so, this class of patient is too numerous in all institutions.

It will be noted that of the patients admitted with pulmonary tuberculosis the highest percentage had far advanced disease—36%. There were 28% with moderately advanced disease and 25% with minimal tuberculosis. Sixty-three patients were admitted for diagnosis and found to have various kinds of non-tuberculous disease; 19 were still undiagnosed on discharge, and 6 were found to have no disease. One of the important functions of the Clinic is to admit this type of patient and diagnose or rule out tuberculosis as a cause of their illness.

There were 430 discharges. The average stay per patient was 36 days. This is probably too high for an institution of this kind and is accounted for by waiting lists in Sanatoria and, in some cases, the abnormally long stay of children who are not readily accommodated in adult institutions.

Operating Room: In the operating room pneumothorax continues to be the main activity but other minor procedures are carried out as well. There were 1,239 pneumothorax treatments and 209 pneumoperitoneum treatments given.

It will be noted that pneumothorax and pneumoperitoneum treatments together are becoming less each year. This is partly due to the new trends in surgical treatment—lobectomy and partial excision of lobes. We think also that some of this tendency is due to the fact that mass surveys and more intensive case-finding are discovering cases at a stage where they are not suitable for collapse of the lung by pneumothorax—that is, many people with disease nowadays are seen before they develop symptoms and the disease is still in a solid uncollapsible state. These types are more amenable to surgical removal.

Laboratory: The laboratory total is down slightly, which is explained by the fact that in 1951 a tuberculin testing survey was carried out in several city schools and this increased the total number of procedures in the laboratory by over 2,000 for that year. Laboratory work otherwise has continued at its usual high standard. We are still trying to increase our vaccination program and in 1952 there were almost 200 more people vaccinated than in 1951. This increase is due to the vaccination of children known to have had exposure to tuberculosis.

X-ray Department: In the X-ray Department there were about 400 more X-rays taken than in 1951. The addition of a planigraph attachment to our X-ray unit has been a decided improvement to our diagnostic equipment.

The Clinic staff maintains relations with all the hospitals in Winnipeg and provides a consulting service to all when necessary. To some extent this service is also supplied to many rural hospitals.

Lectures on tuberculosis are given to the nurses of two of our largest hospitals, and during the Medical School term the students of third year are taught here once a week.

TRAVELLING CLINICS AND SURVEYS

Last year there were 103 travelling clinics held at 40 different centres, being 14 more clinics than in 1951. There was also an increase in the number of examinations—5,566 as compared with 4,055 in 1951—and 46 new cases of tuberculosis were reported. Ex-sanatorium patients were also seen and examined when possible.

Mass survey X-rays decreased last year by 52,282. The total X-rayed was 193,594, which includes 13,053 Indians. This total is made up of Rural and City surveys, industrial X-rays, and Indians. There were 385 new discoveries of tuberculosis, but, fortunately, the majority of these did not need treatment.

Hospital Admission Program: Hospital admission films were received and reported on from 34 hospitals. The total number of films read were 14,910. There were 23 reported as probably active tuberculosis and recommendations made for investigation.

As previously stated, these figures do not in any way apply to the whole of the province but simply to the work carried out here, and, beyond reporting to you in total figures, I do not propose to make any comment. This will be done by Dr. Ross when reporting on the overall program.

APPRECIATION

From the foregoing I hope I have been able to briefly indicate to you the many and varied activities that take place in the Central Clinic building. Without a great deal of help this would be impossible. In conclusion, I would like to again thank all members of the staff of the Central Clinic and those who have a hand in the preventive program for their loyalty and interest in this work.

To the members of the Board and especially the Chairmen of Committees and the Executive, I wish to extend my sincere appreciation. Here I would also like to express my thanks to Dr. Ross and Mr. Cunnings for their helpfulness and interest.

We also extend to the sister institutions and the general hospitals our thanks for their ever-ready co-operation.

Respectfully submitted,
(Sgd.) D. L. SCOTT, M.D.,
Medical Superintendent,
Central Tuberculosis Clinic
and Preventive Services.

City of Winnipeg

TUBERCULOSIS CONTROL DIVISION

DURING 1952 there were 23 deaths in Winnipeg due to pulmonary tuberculosis. This corresponds to a tuberculosis death rate of 9.6 per 100,000 population and is the second lowest death rate ever recorded in Winnipeg. The following table illustrates the progress which has been made in the control of tuberculosis:

Year	No. of Deaths	Rate per 100,000 Population
1922	91	45.7
1932	69	31.5
1942	52	23.1
1952	23	9.6

HOSPITALIZATION

There was a monthly average of 214 patients hospitalized at City expense in the various Sanatoria during the year 1952. This is a slight reduction in the monthly average (238) of patients hospitalized in 1951. The majority of patients were hospitalized in King Edward Memorial Hospital.

X-RAY SURVEYS

During 1952 the chest X-ray survey programme continued to expand. The mobile 70 mm. X-ray machine previously purchased by the Sanatorium Board of Manitoba and loaned with staff to the City Health Department, the stationary 4 x 5 X-ray unit at the City Hall and a second 70 mm. machine loaned to us during the winter months by the Sanatorium Board for the purpose of X-raying High School children were all utilized in X-raying a total of 52,466 individuals.

Seven hundred and thirteen office, business and industrial concerns were provided with an opportunity for their employees to have a chest X-ray at one or other of the 113 sites where the X-ray machines were set up. 98.2% of the employees of these business concerns attended for an X-ray.

70 mm. Units

No. of operational sites	113	
No. of industries X-rayed	713	
Average attendance	98.2%	
No. of high school children X-rayed		7,132
No. of separate and at private schools and colleges		1,112
No. of industrial X-rays taken		32,946
Total 70 mm. X-rays		41,190

4 x 5 Unit at City Hall

No. of survey, contact and patient X-rays		6,789
No. of pre-employment X-rays		4,487
Total 4 x 5 X-rays		11,276
Total X-rays taken during 1952		52,466

Twenty-five new active cases of pulmonary tuberculosis were discovered during the year, which is 27.5% of the total number of new active pulmonary cases discovered in Winnipeg by all agencies such as private physicians, sanatoria, hospitals, private and public clinics.

Active Cases of Pulmonary Tuberculosis Discovered Annually—Winnipeg

Year	By all means	By City Health Surveys	% of Total found by City Health Surveys
1950	95	28	29.5
1951	77	22	28.6
1952	91	25	27.5

There was a ratio of one new case discovered for every 2,099 individuals X-rayed.

Active Cases of Pulmonary Tuberculosis Discovered Annually by Surveys

Year	No. X-rays	Total Active Cases	Active Case Rate per 1,000 X-rays
1949	31,311	28	.9 or 1 every 1,118 X-rays
1950	44,916	22	.5 or 1 every 2,042 X-rays
1951	73,734	35	.5 or 1 every 2,107 X-rays
1952	52,466	25	.5 or 1 every 2,099 X-rays

In addition to these new unsuspected cases of tuberculosis some individuals were found to have other significant pathology of the lungs, heart or great vessels. Such individuals were advised to consult their own physician for further advice or treatment as required.

Source of Active Cases Discovered by Health Department

Surveys	17
Pre-employment	1
Referred by private physicians	7
Total	25

It should be noted that there were 1,136 individuals referred to the City Hall by private physicians for chest X-rays and that 7 new active cases were discovered among this group or a ratio of one new case in every 162 physician referrals. These referrals were in the main for pre-natal chest X-rays, routine chest X-rays in conjunction with a physical examination or suspect chest X-rays.

As will be seen in the following table tuberculosis discovered on surveys continues to be found among those individuals who are in the most productive years of their lives. Sixteen cases or 64% of the 25 new cases were discovered in the 20 to 39 year old age group. However, one of the major advantages of X-ray surveys is demonstrated in the next table, which shows that in 44% of the discovered cases the disease was minimal in extent.

Active Cases Discovered through X-rays taken on Surveys and at City Hall by Age Group

Year	0-19 yrs. No.	0-19 yrs. %	20-39 yrs. No.	20-39 yrs. %	40-59 yrs. No.	40-59 yrs. %	60 yrs. and over No.	60 yrs. and over %	Total
1949	3	11	17	60	7	25	1	4	28
1950	1	4	18	82	3	14	....	....	22
1951	10	29	20	57	4	11	1	3	35
1952	5	20	16	64	2	8	2	8	25

Extent of Disease in Active Cases Discovered through Survey in 1952

Extent	No. of Cases	Percentage
Minimal	11	44
Moderately advanced	7	28
Far advanced	6	24
Pleurisy with effusion	1	4
	25	100%

TUBERCULOSIS IN RECENT EUROPEAN IMMIGRANTS TO WINNIPEG

Early in 1952 a study was completed on the amount of tuberculosis discovered among recent European immigrants to Winnipeg. This study showed that during the years 1950 and 1951 28 new cases of active pulmonary tuberculosis were discovered in recent immigrants, indicating that the incidence of tuberculosis among this group of our population is four to five times greater than the incidence among our usual population.

As a result of this study it was recommended that the high incidence of tuberculosis being discovered among recent European immigrants in Winnipeg be brought to the attention of the Canadian immigration authorities in Ottawa and that more rigid measures of medical examination by the Department of Citizenship and Immigration be urged.

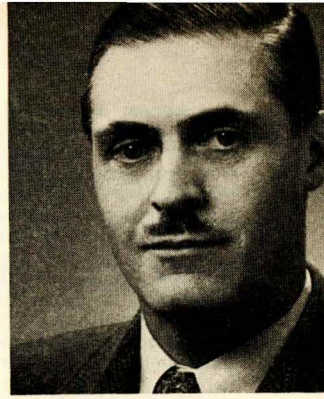
APPRECIATION

In conclusion the co-operation extended to the City Health Department by the various agencies concerned with the treatment or control of tuberculosis has been greatly appreciated. In particular we are grateful to the Sanatorium Board of Manitoba for loaning the City Health Department technical staff when required; for the interpretation of X-ray films and for various equipment and supplies.

Respectfully submitted,
(Sgd.) R. G. CADHAM,
Deputy Medical Health Officer.

Treatment

MANITOBA SANATORIUM



DR. A. L. PAINE

IN the past year, which was its 43rd of operation, Manitoba Sanatorium has continued to offer an active service in the treatment of tuberculosis.

PATIENTS

Treatment days for 1952 numbered 92,353, or slightly below the average of 92,660 for the past five years. The trend towards more patients with Indian blood continued; 48 being admitted for treatment as compared to 27 in the previous year.

ADMISSIONS AND DISCHARGES

During the year 302 patients were admitted, 208 for treatment and 94 for review or diagnosis. Average age on admission was 35 with males predominating 110 to 98. Of those admitted for treatment of pulmonary tuberculosis 50% had not previously been treated 23% were old patients suffering relapse and 27% were continuing treatment after periods elsewhere. In the 83 new cases of pulmonary tuberculosis admitted this year 68% had moderately advanced or far advanced disease as compared to 54% in 1951. Limited figures do not permit conclusions, but one is impressed recently with the number of patients with advanced disease who are coming for treatment. Admissions with non-pulmonary tuberculosis were glandular 5, bone and joint 3, peritonitis 4, pericardities 1, renal 4, salpingitis 1. Diabetes in patients under treatment seems to be increasing; at present 8 have this complication.

Total discharges were 302 of which 207 were from treatment and 95 were in for review or diagnosis. Discharge status of those with pulmonary tuberculosis was as follows: Inactive 13.6%, arrested 59.2%, active improved 21.2%, active unimproved 1.1%, dead 4.8%. There were 9 deaths as compared to 10 in 1951 and 40 in 1935. Average duration of treatment was 1 year and 7 months. Eleven patients went home with positive sputum of which 7 had been re-admitted elsewhere.

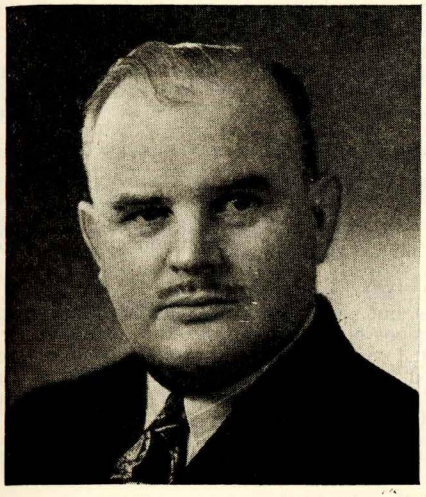
OUT-PATIENTS

During the year 1503 patients were examined. Of these, 358 were old patients back for review, which included interim history, sedimentation rate, sputum examination where indicated, X-ray and conference.

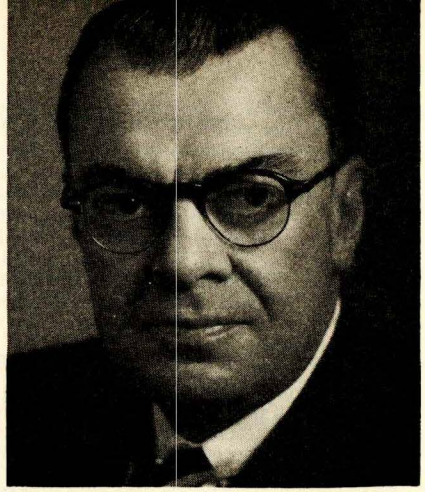
TREATMENT

The past year has been a transitional period in our thinking about the treatment of pulmonary tuberculosis. Rest is still the basic treatment, but the use of streptomycin has lead to further changes in surgical principles. Until recently the accepted treatment in our hands was to apply as limited collapse as possible by thoracoplasty to residual significant disease after maximal clearing had taken place through streptomycin therapy. In the past year we have come to believe that in many instances limited resection is preferable to limited collapse in the treatment of these residual unstable foci. Limited resection is thought to conserve more lung tissue, give a higher incidence of sputum conversion and to now be a relatively safe procedure. Though pulmonary resection has increased in the past year we have had to apply it mainly to thoracoplasty failures due to a considerable accumulation of these cases over a period of years. However, in suitable cases we have been withholding thoracoplasty and planning ulimate resection if residual unstable disease persists after long periods of streptomycin. Pneumothorax is being used less frequently and only in minimal lesions. In most patients with minimal tuberculosis prolonged streptomycin therapy would seem preferable with resection when necessary in persistent unstable lesions.

During the year 9 patients had pneumothorax induced and maintained and 21 patients started pneumoperitoneum and continued the treatment. In all, 83 major chest operations were performed. There were 53 stages of thoracoplasty of which 8 were extraperiosteal packs, 7 with wax and one with lucite. Pulmonary resection was done in 14 patients, in 11 of whom thoracoplasty had previously failed. Extent of resection was as follows: pneumonectomy 4, lobectomy 8, segmental resection 1; lesionectomy 1. Other major procedures were decortication 2; cavernostomy 2, closure of bronchial fistula 2, plastic closure of chest wall sinuses 9, excision of angle of scapula 1. There was one operative mortality in a patient lobectomy. Minor surgical procedures include pneumonolysis 10, phrenic operation 21, appendectomy 1, bronchoscopy 95. A complete list of operative procedures is appended.



—National Film Board Photo



—Photo by Karsh

HON. PAUL MARTIN
Minister of National Health and Welfare

P. E. MOORE, M.D., D.P.H.
Director, Indian Health Services, Department of National Health and Welfare

Statement

by the

HON. PAUL MARTIN
Minister of National Health and Welfare

for publication in

The Annual Report of

THE SANATORIUM BOARD OF MANITOBA

AT the beginning of this century, Canada was among those nations having the highest tuberculosis death rates. Today, thanks to the determined efforts of our devoted health workers, this country has one of the lowest death rates in the world. Our success in bringing tuberculosis more effectively under control has been the direct result of whole-hearted co-operation between government agencies, organized health associations, professional and voluntary health workers, and individual citizens.

The Sanatorium Board of Manitoba is greatly to be commended for the energetic direction it has given to this province's outstanding tuberculosis control program. Its objectives have included the discovery of new cases as early as possible, the provision of prompt and adequate treatment facilities and the development of a sound rehabilitation service. The effectiveness of the Board's work is clearly indicated by the fact that, from 1945 to 1951, Manitoba's tuberculosis death rate has been actually cut in half.

It is a source of considerable gratification to me that the Federal Government has been able to strengthen and support the vital work the Board is doing by providing financial assistance under the Tuberculosis Control Grant. In the five years since the inauguration of the National Health Program, federal grants in aid of tuberculosis control in Manitoba have involved expenditures of some $640,000. As Minister of the Department responsible for the health care of our native population, I also wish to thank the Sanatorium Board of Manitoba for the splendid manner in which it has operated the three federal sanatoria for Indian patients located in this province.

In commending the Board on its past achievements, may I express the hope that, in the coming year, with the interest and support of the public at large, it will be possible to maintain and add to its impressive reputation in fighting this great scourge. I hope, too, that this fine humanitarian work will continue to receive the recognition it so richly deserves.
(March, 1953.)

Care of Indian Patients

From the Report of the Medical Director

I DOUBT if such a remarkable reduction in tuberculosis deaths among a people has ever been demonstrated in such a short time as among the Indians of Manitoba. Until about ten years ago there was practically no programme for controlling the disease among them but, since Clearwater Lake Sanatorium was opened in 1945 and Brandon Sanatorium in 1947, nearly 500 Indians have been constantly on treatment. For the past five years approximately 15,000 Indians on their reserves have been X-rayed annually. In 1952 the number was 13,193, of which 2,442 were in Western Ontario. The marked drop in the tuberculosis deaths is accounted for by earlier diagnosis, isolation and treatment. After the first two years of X-ray surveying the new cases decreased but, as with white people in 1952, new active cases increased —from 169 in 1951 to 182 in 1952. It is evident that yearly X-ray surveys should be continued to discover spreaders of infection. A record of all cases is kept by the Central Registry, the same as for white people, and various details are contained in the appended statistical report.

REPORT of the REGIONAL SUPERINTENDENT, INDIAN HEALTH SERVICES

IN 1937 the only sanatorium provision for treaty Indians was Dynevor Hospital with 50 beds. The death rate per 100,000 was then 1,446. In 1945 Clearwater Lake Sanatorium was opened with about 100 beds. The death rate then was 928. In 1947 Brandon Sanatorium was opened with 250 beds. The death rate was 709. In 1950 it was 520. In 1952 it was 163. Active work on X-ray surveys for Indians dates from 1947.

While we have never been able to X-ray more than 66% of Indians in any year we have been able to reduce the death rate from 709 in 1947 to 163 in 1952. This compares favourably with Saskatchewan Indians, who had a death rate of 294 in 1952 and whose Indian population can nearly all be reached by car.

However, the gauge of progress in tuberculosis work is not entirely indicated by the number of deaths but also by the state of the disease on admission. I have no figures on how many far advanced cases were admitted, but I think the director and superintendents of sanatoria will agree that there has been a great reduction of such cases.

Out of a population of 18,936 Indians in Manitoba we X-rayed on surveys 10,531, which is only 55%. Probably another 20% were X-rayed on admission to hospitals. We still have a long way to go to reduce tuberculosis to near the rate in the white population. This is complicated by the low standard of living of the Indian and resulting poor nutrition. As we extend our service by using more field nurses we can educate the Indian to build better houses, prevent overcrowding, purchase better foods, improve sanitation and desire an annual X-ray plate.

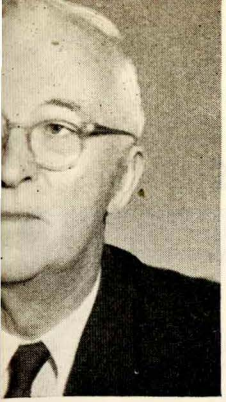
The Indian is at the mercy of ladies' fashions, of the price of furs and fish. So his economy goes up and down with periods of plenty and times of near starvation staved off by a subsistance relief ration. It's a precarious existence, and the stability required for a steady income cannot be foreseen.

This year will require greater efforts on our part to organize clinics, as the annual gathering for treaty payments are being discontinued in some agencies as the Indians will be paid by cheque.

May we take this opportunity to thank the Board, Director and all persons in the Sanatorium Board for their splendid co-operation in making 1952 our best year to date in our fight against tuberculosis.

Respectfully submitted,

(Sgd.) W. J. WOOD, M.D.,
Regional Superintendent,
Indian Health Services.



W. W. READ

DYNEVOR INDIAN HOSPITAL

DURING the year ending December 31, 1952, we admitted 75 patients, discharged 80 and had only 2 deaths. This number is a new low, as never before have we had only 2 deaths for a year. The total number of patient days was 16,942, an increase of over 1,600 days compared to 1951. The total revenue was $79,764.00.

TREATMENT

In addition to the regular sanatorium care, streptomycin, P.A.S., pneumothorax and pneumoperitoneum, Nydrazid was also given to the more severe cases. In some of these cases, the Nydrazid gave almost miraculous results, while in others there was not much change in the patient's condition. Yearly we find a decrease in the number of far advanced cases that come to Dynevor. This is, no doubt, due to the X-ray survey units which are doing extensive work in Manitoba. There are also more and more cases being discharged in a cured or arrested condition. We had 3 patients that left the Sanatorium against medical advice. The excellent meals are still continuing at Dynevor and these in turn are tending to keep the patients in a happy frame of mind. The meals are also a most important factor in the steady increase in weight that is evident in most of the patients.

STAFF

During the year we had two Matrons. Miss Ellis commenced duty in January and continued until the first of September, when she was transferred to Clearwater Lake. During that time she made a favourable impression on all the Staff. At that time Miss Stefanson returned as Matron. She had been Matron on two previous occasions, but due to ill health was forced to leave. She is a good administrator and gets on well with the Staff, and we are delighted to have her with us again. In addition to being Matron she is also a trained X-ray technician and is to be commended highly on the work that she has done. Both the Nursing Staff and the Domestic Staff have worked well during the year, and to them both I extend my sincerest thanks.

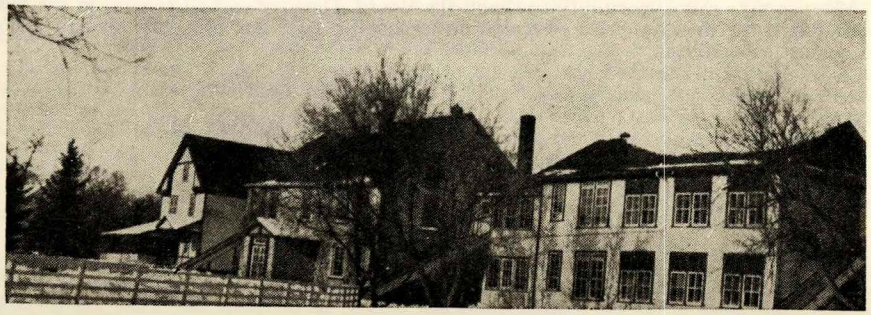
PLANT

There have been quite a few changes at Dynevor in 1952. The main kitchen was doubled in size and new modern shelves and cabinets were installed. We also got an electric dishwasher and a dumbwaiter. Now all the cooking, both for the patients and the staff, is done in the main kitchen. The diet kitchen on the second floor has been converted into a three-bed ward, with a single ward, in turn, being made into a chart room. This now gives us a bed capacity of 53 beds and cribs. The nurses' home has been redecorated with new paint and wallpaper on the rooms, halls and stairways. Two bedrooms have been completely refurnished. There was also an oil-burning furnace installed, and it is giving good satisfaction.

APPRECIATION

In conclusion, I would like to express my sincere thanks to the members of the Sanatorium Board and the Dynevor Committee for their kindly help and co-operation in the past year. I would also like to thank Dr. Ross, Dr. Scott and Dr. Carey for all their assistance in 1952. Thanks are also due to the Medical, Accounting, X-ray and Laboratory Departments of the Central Clinic; to Dr. Wood and his Staff; and also to all the Medical Superintendents of the Sanatoria for their help and advice throughout the year.

Respectfully submitted,
(Sgd.) W. W. READ,
Medical Superintendent,
Dynevor Indian Hospital.



Dynevor Indian Hospital.

DR. A. H. POVAH

BRANDON SANATORIUM

IT IS with pleasure that I present the Sixth Annual Report of Brandon Sanatorium, a 260-bed institution. All departments functioned efficiently and well during the year 1952.

ADMISSIONS AND DISCHARGES

During 1952, there were 170 admissions to the Sanatorium. Of these, 56 or 32.94% were new cases of tuberculosis, 20 or 11.76% were readmissions of known cases of tuberculosis requiring further treatment, and 68 or 40% were transfers of cases which required further treatment from other institutions to Brandon Sanatorium.

Breaking down the cases of pulmonary or chest disease, it is noted that only 25 or 19.0% were admitted with minimal or a slight amount of disease; 45 or 35.7% had moderately advanced disease; 39 or 30.95% had far advanced disease, and 12 or 9.52% had primary combined or childhood type of disease. These percentages are the same as last year and are quite a contrast to the cases of tuberculosis diagnosed amongst the white population. For example, last year's figures show that of all new cases admitted to sanatoria in Manitoba, 50% had minimal or slight amounts of disease, whereas of Indians admitted to sanatorium, only 19% have minimal disease. The deductions to be made are that tuberculosis amongst Indians still is not being diagnosed early enough, that the Indian patient's prognosis will not be so good, and that he will have to spend longer in sanatorium than will the average white patient.

With the reported increasing tendency to find active cases of disease amongst the older white population, it is interesting to note that with Treaty Indians, it is still the younger age groups that are affected. Of the 144 tuberculous admissions, all but 15 were under forty years of age, and 60 were less than twenty years of age.

There were only 6 cases of bone and joint tuberculosis admitted this year, as compared with 18 last year.

Ten were admitted primarily for treatment of cervical adenitis. Only 2 cases of miliary tuberculosis with meningitis were admitted during the year.

Patients discharged from Sanatorium in 1952 numbered 156. Of these, 37 were transferred to other institutions; 6 or 3.8% left Sanatorium against medical advice. This compares with 7% who took non-medical discharges from all sanatoria in Manitoba in 1951. Of the 6 non-medical discharges, 4 have been re-admitted to other institutions, and the 2 at large were abacillary, one being a Pott's disease. The remaining discharges had completed Sanatorium treatment.

Not a single patient went home during the year with positive sputum.

During the year, there were 13 deaths. The deaths have shown a steady decline since 1948, when there were 33 deaths. Of the 13 deaths last year, 3 were due to non-tuberculous conditions, 2 were due to meningitis, and one was a tuberculous peritonitis complicating a Pott's disease, so that only 7 deaths were due to pulmonary or chest disease.

TREATMENT

The decreased death rate is largely attributable to the superior results obtained with current therapy. Streptomycin combined with para amino salicylic acid continues to be the most valuable chemotherapeutic agent in the treatment of tuberculosis. However, the drug isonicotinic acid hydrazide, introduced in the spring of the year, though not so efficacious as streptomycin, has a similar effect on the disease and is useful in the treatment of cases who have become resistant to streptomycin. Also, patients very ill with bilateral far advanced pneumonic disease and with miliary meningitis have shown more rapid improvement on a combination of P.A.S., streptomycin, and I.N.H. than could be expected as a result of treatment with any one of these drugs alone.

It has also been recommended and confirmed that treatment with streptomycin given bi-weekly with daily P.A.S. should be continued for long periods of a year or more without interruption. The disease may clear completely on this regime, or residual foci may be left. After maximum improvement has been obtained, surgery is considered, and when tomograms show the residual foci to be caseous nodules or cavities, excisional surgery is the treatment of choice. Streptomycin has also made surgery safer, markedly reducing complications so that, latterly, we see a decline in the use of thoracoplasty, pneumothorax, and pneumoperitoneum, and an increase in the use of streptomycin and P.A.S. and resection surgery. It must not be forgotten, however, that these older procedures still have a valuable and useful place in our treatment armamentarium.

Brandon Sanatorium.

During the year, 30 patients had thoracoplasty (6 conventional and 24 with extraperiosteal lucite plombage), and 17 had a pulmonary resection. As of December 31, 1952, 13 patients were receiving pneumothorax and 57 receiving pneumoperitoneum. Two hundred and two patients received 13,547 grams of streptomycin during the year.

We are extremely grateful to our Consultants for their contribution to the patients' care, especially to Dr. Alexander Gibson, F.R.C.S. (Eng.), who did 14 orthopedic operations during the year, and to Dr. R. F. M. Myers, who gave the anaesthetics for all the resection cases.

X-ray Department. This department, under the direction of Mr. F. H. Gibson, R.T.' continues to progress with the treatment of tuberculosis and to keep abreast of the latest trends. The X-ray, after all, is the spearhead of all tuberculosis work, for with it we make the diagnosis and follow the patient's progress during treatment. This department made 5,261 radiographic examinations during the year, an increase of 783 examinations over 1951. An invaluable part of radiographic work is the taking of planigrams. We believe every chest lesion should be planigraphed, at least when it has become stable, to show up unsuspected nodules or tuberculomas and cavities often missed in the ordinary chest film.

Mr. Gibson has also developed an enviable Photographic Department. His coloured transparencies of clinical cases and operative procedures are exceptionally good. These give a visual record of the patient and his disease before and after treatment; a very important part of the hospital records. They are also invaluable for teaching purposes and formed a basis for three medical papers presented during the year.

Laboratory. The Laboratory, under the direction of Miss L. E. Delamater, R.T., is also becoming more and more important as a clinical and therapeutic guide. Close laboratory control of patients is required during the administration of the newer drugs to detect any sign of toxic or unfavourable effects on the patient. Furthermore, the increase in resection surgery has meant increased work for the laboratory in checking the patient pre- and post-operatively.

It has become increasingly apparent that fungus infection is not an uncommon cause of pulmonary disease. For this reason, routine examinations for fungi are done on all sputum and bronchial specimens received from patients with undiagnosed chest conditions. We are indebted to Dr. Geo. Elliott and Dr. J. C. Wilt for their help and guidance in this work.

In conjunction with Dr. T. H. Williams, Chief of Laboratory Services, Deer Lodge Hospital, Winnipeg, 234 patients were examined for intestinal parasites and 36 patients or 15% were found to harbour parasites.

Thus, we can account for the increase of 2,000 laboratory procedures over last year and the total of 14,114 laboratory tests done during the year.

Out-Patients. Brandon Sanatorium conducts an Out-Patient Clinic every Wednesday afternoon for the examination of contacts of tuberculous patients, ex-patients, and suspects referred by the family physician from Brandon and district. Last year, 968 out-patients were examined.

STAFF

We are most fortunate to have a very fine Medical Staff: Dr. C. L. Hsu, a qualified radiologist and experienced chest man, Dr. Wm. Shahariw, now a most competent and valuable assistant, and Dr. U. Quint, a recent addition to the staff.

Mr. G. R. Gowing, Business Manager, and Mrs. I. A. Cruikshank, Superintendent of Nurses, have guided the Administrative and Nursing duties competently and enthusiastically. Especially commendable is their interest in the growth and development of the hospital as a first class treatment centre. (Brandon Sanatorium was given full approval by the Hospital Standardization Department of the American College of Surgeons, following an inspection by their representative, Dr. Armand J. Brunet). Also commendable is their desire to foster interstaff fellowship and build up in the community an interest in the institution.

We are highly pleased with all new department heads appointed during the year:

Miss M. Coates—Operating Room Supervisor.
Mr. Wm. Woodland—Chief Cook.
Miss M. Morris—Teacher of Arts and Crafts.
Mrs. E. Denbow—Housekeeper.

We wish to praise these persons and all other staff members who have carried out the nursing and other duties of the hospital in a highly efficient manner.

REHABILITATION

This department has undergone major changes during the year. We wish to commend the two school teachers and the arts and crafts teacher for the work accomplished, and Miss C. M. Fraser, recently retired school teacher, whose fine work culminated in having two of her students enter college.

MEDICAL PAPERS

Medical papers were presented at the Canadian Tuberculosis Association meeting in Regina in June, 1952: "Thoracoplasty with Extraperiosteal Lucite Plombage," and at the Manitoba Medical Association meeting in Winnipeg in October, 1952: "Recent Advancements in the Treatment of Tuberculosis." Also, a paper was given at the Brandon and District Medical Association meeting in May, 1952.

APPRECIATION

In closing, I would like to express my sincere appreciation of a loyal, devoted, and energetic Staff. I want to thank, too, the Medical and Executive Directors, the Chairman of the Sanatorium Board of Manitoba, and the Chairman of the Brandon Sanatorium Committee and its members for their help, guidance, and direction during the year. Also, sincere thanks are extended to the Medical Superintendents of the other Sanatoria, especially Dr. A. L. Paine, and the Medical Consultants who contribute to the patients' care, for friendly relationships and their kind co-operation.

Finally, I wish to thank the Department of National Health and Welfare, Dr. W. J. Wood, Regional Superintendent of Indian Health Services, and its field workers for their interest, help, and assistance in helping to eradicate tuberculosis amongst the Treaty Indians.

Respectfully submitted,

(Sgd.) A. H. POVAH, M.D.,
Medical Superintendent,
Brandon Sanatorium.

Brandon Sanatorium was honored in 1952 by a visit from His Excellency the Rt. Honourable Vincent Massey, Governor General of Canada.

S. L. CAREY

CLEARWATER LAKE SANATORIUM

THE following is the annual report of the 8th year of operation of Clearwater Lake Sanatorium, the superintendency of which I assumed July 16, 1952.

ADMISSIONS AND DISCHARGES

The average bed occupancy was 160 and 58,022 patient-days were utilized in treatment during the year. Of 233 admissions, 85 (26.9%), were afflicted with pulmonary tuberculosis and 11 with non-pulmonary disease; 73 after full investigation were found not to require treatment; and of the 233 admissions 48 or 20.6% were re-admissions, which is a reassuring figure by comparison with previous years. Pulmonary relapses numbered 40, and tuberculosis manifested itself elsewhere in the body in 5 others.

Distribution of disease in the new discoveries revealed an increasing trend toward minimal findings; a desirable situation.

Minimal	Moderately Advanced	Far Advanced
21	19	14

Age grouping demonstrated that 6 admissions were over the age of 70, but quite formidable was the fact that 45 of the new discoveries were under the age of 9 years.

A safe assumption would be that these children had been infected by contact in the home and would stress the desirability of isolating, in sanatorium, with greater rapidity all active cases of tuberculosis discovered through the medium of travelling clinics.

Those deceased of tuberculosis numbered 12, and a comparative table is enlightening:

	Bed Capacity	Admissions	Deaths	Discharged
1945	78	103	4	3 mth. only
1947	78	75	22 (45%)	49
1948	164	119	25 (29%)	82
1949	164	205	33 (28.4%)	116
1952	164	233	12 (5.3%)	225

This downward trend is possibly due to the combination of three major factors: earlier discovery of the disease; application of modern chemotherapeutic measures; improved medical and nursing care.

PROGRESS

In the light of new superintendency, the time would seem opportune to review the past history of the Sanatorium and to consider its future.

August 1, 1945. The institution, originally intended as an American Army field hospital, was taken over by Indian Health Services and operated by the Sanatorium Board as a treatment centre for Northern Indian tuberculosis. Plumbing was primitive; there were no sewage lines and no incinerator and the flooring in wards and corridors was of soft wood, easily splintered. Staff quarters were army huts heated by oil stoves.

An equipped and adequate engineering department with work shop were lacking and there was no infirmary or morgue. Transportation too, was a problem, as the vehicles inherited from the army had been cruelly abused and were in varying stages of disrepair.

1947. Under the auspices of the Sanatorium Board, a program of wholesale construction and renovation was instituted. A residence for the medical superintendent was erected, the permanent female "H" section was completed and by the construction of "J" ward, male infirmary beds became available.

1948. The close of this year saw the renovation of the administrative wing and the remodelling of the kitchen. This was originally one quarter of its present size and housed both kitchen and dining room, but it has now evolved into a spacious area with a separate well-decorated servery of sufficient dimension to accommodate 100 members of the present staff, which has doubled itself in the past five years.

1949. The housing unit occupied by the chief engineer became a *fait accompli.*

1950. By virtue of funds raised through the operation of the hospital canteen, a curling rink with two sheets of ice was installed.

A thought for the future would be the construction of a recreational centre similar to that in operation at Ninette, and would seem justified by our relative isolation.

In 1952 a residence for the medical superintendent and quarters for the domestic staff were conjointly completed and two new housing units were erected on the grounds. These were originally army huts and were moved on to their present location by the engineering and maintenance staff. The renovation was so complete that these residences have the appearance of modern new homes, and all wiring and plumbing was performed by Clearwater staff. At present there are three new housing units and four converted hut units, but 11 families reside in the army-type dwelling without steam, water or sewage line. Winter heating becomes an increasing problem.

To briefly review the immediate future, a diet kitchen will be converted into a cheerful, bright nursery and the old vacant domestic quarters are being redecorated to house 26 children presently confined in small side wards. Thus, the present children's ward "M" will become an ambulant self-sufficient female ward and thereby increase the bed capacity.

Tremendous strides have been made, but the future will call for further effort.

STAFF

Dr. J. M. Ridge accepted a post in Winnipeg on July 16th, and I was transferred from the Preventive Service to take office.

Dr. Muehlenbeck remained on the staff and has proved capable and efficient and well able to assume responsibility. Dr. Mishima arrived from Japan to study Canadian methods.

Miss M. Pearson, Superintendent of Nurses, was replaced by Miss Derinda Ellis, previously at Dynevor Indian Hospital, and under her guidance nursing care has become an efficient and disciplined entity. Miss Ellis is deserving of the highest praise.

Despite staff problems and Mr. E. Dubinsky's transfer to Winnipeg, Mr. Carl Christianson has continued to manage the institution in a cool and efficient manner.

Mr. Johnson supervised all maintenance and construction personally, and was untiring in his efforts. Mr. Lock's department performed efficiently and handled over 260,000 separate items of laundry during the year.

All department heads and the staff in general are to be commended for their co-operation and their unselfish interest in the institution.

X-ray Department. Almost 1,900 institutional X-rays were taken by Mr. J. Kaczoroski and 7,302 persons passed through travelling clinics.

From 6,154 Treaty Indians X-rayed, active findings of pulmonary tuberculosis numbered 28, a comparatively low percentage of 0.045%.

Minimal	Moderately Advanced	Far Advanced
19	18	1

Of the suspects, 11 have been investigated, but there are still 21 requiring examination, and radiologically 7 of these have active disease.

Laboratory. Mrs. Muehlenbeck has performed a herculean task in this department during the past four months. A total of 2,845 individual examinations were performed with no assistance. Her work has been accurate and completely reliable.

Arts and Crafts. At the close of the year, 27 patients were on therapy and Mrs. Hill has displayed a comprehensive knowledge of the requirements of the Indian patient. In her teaching capacity, Miss Marion averages 20 pupils per month, but obviously these numbers are controlled by the recently instituted restricted routine for bed patients.

APPRECIATION

My sincere appreciation is extended to the Chairman and Members of the Sanatorium Board, to the Medical Director and Executive Director and to my Medical Superintendent associates elsewhere. In particular, I wish to thank Dr. E. L. Ross for his counsel and indulgence during this, the formative stages of my appointment.

I acknowledge with gratitude the close co-operation of Dr. W. J. Wood, Regional Superintendent, Dr. R. F. Yule, and Dr. B. Claman of the Indian Health Services.

Respectfully submitted,
S. L. CAREY,
Medical Superintendent,
Clearwater Lake Sanatorium

Winter scene — Clearwater Lake Sanatorium.

C. SINCLAIR

ST. BONIFACE SANATORIUM

THIS report for the calendar year 1952 deals with the twenty-first year of service to the tuberculous sick in this province. The Sanatorium is owned and operated by the Sisters of Charity of the Grey Nuns Hospital of Montreal. Our organization co-operates with the Sanatorium Board of Manitoba, whose aim is the eventual eradication of all illness caused by this great enemy of mankind.

The total number of treatment days in 1952 has again established a new record of 101,314 as compared to 98,015 a year ago. Placing our bed capacity at 287, our occupancy has been 97.4%. On December 31, 1952, the patient population was 276, consisting of 113 men, 115 women and 48 children.

ADMISSIONS AND DISCHARGES

The admissions for the year came to 215. There was a steady demand for male beds and the proportion was 115 males to 100 females. From the table "Age on Admission" it will be seen that the largest number of admissions came from the age period 30 to 39. In the age group 60 years and over, there were 24 or 11%.

The table on Racial Origin supplies information of value to physicians and others interested in case finding. The groups yielding the largest number of tuberculous patients were Indian, Metis, Ukrainian, French, English, Scottish, Polish and German, listed in the order of occurrence. Occupation and industry in this area does not appear to have special bearing on etiology.

Of the total admissions, all were for the treatment of tuberculosis except 12 whose final diagnosis was as follows: bronchiectasis 1, pulmonary cyst 1, undiagnosed 2, tuberculosis suspects 6, and newborn 2. One hundred and seventy-two or 80% were for the treatment of pulmonary tuberculosis. Of these 39.5% were far advanced, 27.3% moderately advanced, and 23.8% minimal.

The fundamental purpose of a sanatorium is treatment and isolation. A review of the discharged yields considerable information as to how these functions have been carried out. Two hundred and six patients were discharged—66.5% because treatment was completed; 3% were transferred to other institutions for various reasons; 20.3% left the Sanatorium against medical advice; and 7.2% deceased. One hundred and sixty-one of these had a diagnosis of pulmonary tuberculosis. Their condition on discharge was as follows:

Inactive	1.8%
Arrested	49.1%
Active Improved (1) Bacillary	7.5%
(2) Non-bacillary	29.1%
Active Unimproved	3.8%
Deceased	8.7%

Six patients were discharged with a diagnosis of pleurisy with effusion. This is respiratory tuberculosis and is usually included with pulmonary tuberculosis. Twenty-six patients were discharged with a diagnosis of non-pulmonary tuberculosis. They include bone and joint tuberculosis, genito-urinary tuberculosis, and so on. Due to the fact that many patients have more than one focus of disease, it is difficult to segregate them completely.

The average duration of treatment for all patients was 372 days. The average duration of treatment for respiratory tuberculosis: pleurisy with effusion, 5.4 months; pulmonary tuberculosis in its various stages of minimal, moderately advanced, and far advanced, 13.1, 13.3 and 13.9 months respectively.

Treatment has not varied greatly from the previous years. It consisted of bed rest chemotherapy, and a gradually decreasing amount of pneumothorax apparently due to the effect of streptomycin therapy. Pneumoperitoneum is being used in slightly greater proportion of cases. The number of thoracoplasty cases has slightly decreased and the number of pulmonary resections has increased.

The patients are more contented due to the departments of occupational therapy, rehabilitation and crafts. This tends to provide them with a small personal income.

The Out Patient Department is still growing in size with 1,094 enrolled, as compared with 950 in 1951. There is a large pneumothorax clinic in this group of patients due to the fact the pneumothorax was started some years ago. In fact the pneumothorax given in the Out Patient Department exceeded the Indoor in 1952, the figures being: Indoor, 2,439 refills; Outdoor, 2,695 refills. Nine hundred and thirty-three examinations were done on 604 individuals; 35 patients were re-admitted for treatment from this department. There were 3,013 fluoroscopies, 2,929 pneumothorax refills (including 234 pneumoperitoneum refills), 929 X-rays and all patients had laboratory tests.

Surgery is becoming more and more important in the treatment of tuberculosis. The operations here included thoracoplasty, lobectomy, pneumonectomy, cavernostomy, as well as the various procedures for bone and joint tuberculosis. There were two deaths during the year attributable to surgical procedures: one following spinal fusion and one following pneumolysis.

FINANCIAL

The statement of Income and Expenditure for the year 1952 shows an operating deficit of $27,214.41 compared with $65,661.48 twelve months ago. The following is a comparative summary of the figures for the two years:

	1952	Per Diem	1951	Per Diem
Operating and Other Income	$432,856.10	$4.27	$372,575.21	$3.80
Operating and Expenditure	460,070.51	4.54	438,236.69	4.47
Operating Deficit	$ 27,214.41	$ .27	$ 65,661.48	$ .67
Hospital Treatment	101,314 Days		98,105 Days	

It will be noted that the improvement has been brought about by an average increase of 47 cents in the per diem income, while the average increase in the per diem expenditure is only 7 cents. There was an increase of 3,299 in the hospital treatment days for 1952. The arrangement and terminology of the statements follow, as far as possible, the new Canadian Hospital Accounting Manual.

APPRECIATION

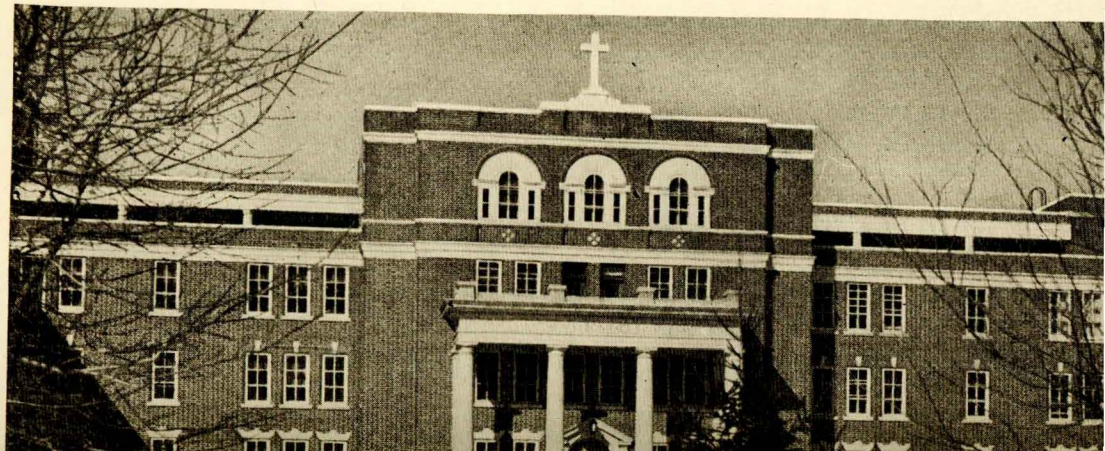
The Medical Department wishes to express appreciation and thanks to the following individuals and agencies who have co-operated with the Sanatorium to the fullest extent: the Manitoba physicians sending patients; the Department of Health for the Province of Manitoba and the Dominion Government; the Department of Social Welfare of the Province and the Cities; the Superintendents and Staff of the various Manitoba Sanatoria; the Sanatorium Board of Manitoba; the Central Tuberculosis Clinic; and the Central Tuberculosis Registry.

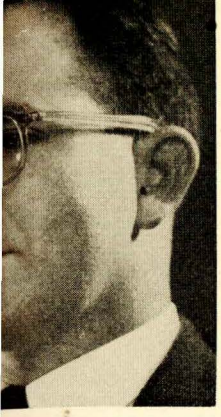
Finally, I wish to express my thanks and appreciation to the Sisters, members of the Medical Staff, and Staff of the Sanatorium in general, for service well rendered during the year.

Respectfully submitted,

A. C. SINCLAIR, M.D.,
Medical Director,
St. Boniface Sanatorium.

St. Boniface Sanatorium, Main Entrance





A. HILDES

Winnipeg Municipal Hospitals

KING EDWARD MEMORIAL HOSPITAL

I BEG to submit this report of the activities of the tuberculosis division of the Winnipeg Municipal Hospitals in 1952.

TREATMENT

During the year there were 152 admissions and 177 discharges. There has been a continued trend away from collapse therapy, which has been enhanced by the introduction of new antibiotic drugs. A small series of 10 cases, who were started on isonicotinic acid hydrazide in April, were followed closely both clinically and with laboratory tests to assess the toxicity of the drug as well as its therapeutic value. In one case there was some post mortem evidence of toxic effect on the liver parenchyma.

By way of surgical treatment, 8 patients had 13 thoracoplasties and 6 cases were transferred to the Winnipeg General Hospital for pulmonary resection.

Three of the nine deaths who had post mortem examinations were found to have extensive amyloid disease. One case of mycosis fungoides was encountered who had been admitted to hospital with the diagnosis of tuberculosis of the hip.

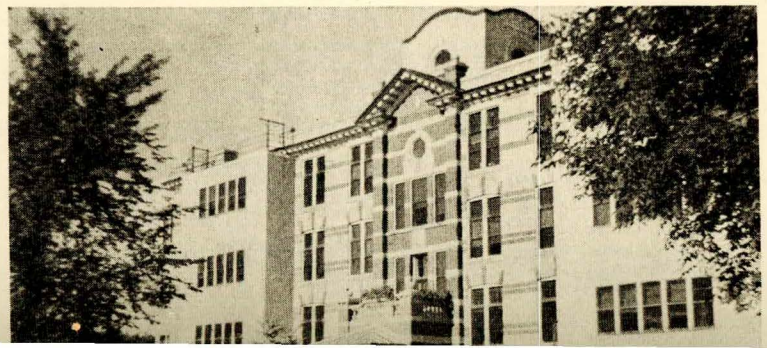
STAFF

There have been no major changes in the staff during 1952. Drs. Alcock, MacDonell and Campbell have been responsible for the care of in-door and out-door patients, the latter two physicians being part-time. Dr. Alcock was away from these duties for the last five months on the year on account of the influx of poliomyelitis patients to the King George Hospital. We were fortunate in having the service of Dr. Walter Zingg of Switzerland for two months. Dr. C. Hollenberg has been added to the consulting staff in orthopedic surgery and Dr. S. C. Windle to the consulting staff in radiology. Both these new members have contributed much to the various ward rounds and staff meetings. Dr. Perrin's knowledge of tuberculosis, as well as his surgical skill, continued to be invaluable.

Dr. MacDonell attended a post-graduate course in tuberculosis at Weston Sanatorium in Toronto aided by a Federal Health Grant and Dr. Campbell attended a short course at the University of Toronto. The annual meeting of the Canadian Tuberculosis Association in Regina was attended by Dr. Perrin and Dr. Alcock attended the annual meeting of the American College of Chest Physicians in Chicago. Dr. Schaberg was given leave of absence for three months to return to Holland in connection with his researches at the Medical School.

There were no changes in the senior nursing personnel. Miss Mary Shepherd, Superintendent of Nurses for the Municipal Hospitals, left early in October to take a course in nursing administration at the Massachusetts General Hospital. Miss V. Cockburn, Assistant Superintendent of Nurses, and Mrs. R. Thorne, Nursing Supervisor of the King Edward Hospital, both attended the biannual meeting of the Canadian Nurses' Association in Quebec City. Student nurses continued to affiliate from several of the metropolitan hospitals for training in tuberculosis. Miss Beatrice Allen joined the staff as nursing instructress.

Miss Moreton retired from the laboratory staff at the end of the year after thirty-five years' service with the hospitals. Two new technicians were taken on the staff during the year, Mrs. E. Pullen and Miss Sharon Campbell. With the help of the Federal Health Grant, Miss Campbell received three months' training in general bacteriology at the Provincial Laboratory under Dr. Leighton and a month in the laboratory of the Manitoba Sanatorium, working with Mr. Scott. Miss Wiseman attended the annual meeting of the Association of Registered Technicians at Niagara Falls.



King Edward Memorial Hospital.

Both X-ray technicians left during the year, but we were fortunate to obtain the services of Miss M. Briggs and Mrs. M. Birtle to replace these losses. Miss Briggs has had extensive experience in Great Britain, both in general X-ray work and in tuberculosis. The work of the department is of a uniformly high standard in spite of staff change-over and the added work entailed in a new X-ray room opened in the Princess Elizabeth Hospital.

ACADEMIC ACTIVITIES

Dr. Alcock successfully passed the exams of the Royal College of Physicians of Canada for certification in internal medicine. Dr. Schaberg was appointed to the staff of the University in the Department of Physiology.

Since the beginning of the academic year fourth-year medical students lived in hospital for a week's instruction in clinical tuberculosis. During the summer months three fourth-year students each did a clinical clerkship in tuberculosis for one month by arrangement with the Department of Veterans' Affairs. During the academic term four undergraduate students have lived in hospital to assist the internes with the routine work and minor procedures. Fifth-year internes continued to rotate monthly onto this service from the St. Boniface Hospital. Second-year medical students are given clinics in physical diagnosis and third-year students clinics in medicine by members of the staff. Members of the staff have also continued to give lectures to student nurses in tuberculosis.

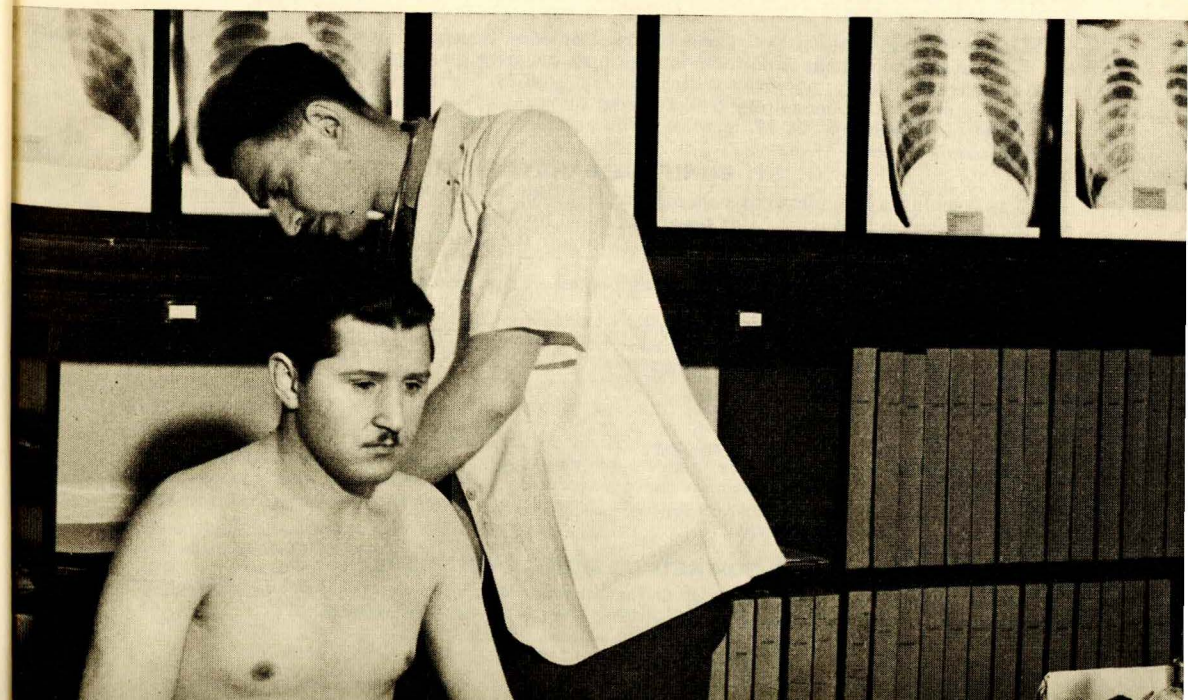
Clinical luncheons, begun in 1951, have been continued and are attended by a gratifying number of practitioners.

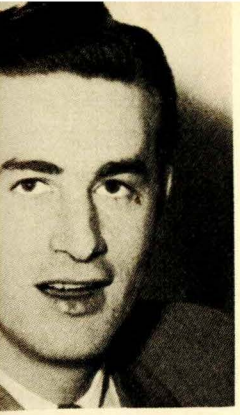
ACKNOWLEDGMENTS

It is a pleasure to acknowledge the help and encouragement of my colleagues on the medical staff and the fine work performed by the nursing and technical staff. Mrs. Thorne, the nursing supervisor, deserves special mention in this regard. The co-operation of the staff of the Business Office has been a pleasure. I also wish to express my appreciation to the staff of the Central Tuberculosis Clinic and the City Health Department for their continued co-operation.

Respectfully submitted,
J. A. HILDES, M.D.,
Medical Director,
Winnipeg Municipal Hospitals.

Careful periodic follow-up examinations protect the patient's continued good health after discharge from Sanatorium.





G. METCALFE

Re-Employment

Report of the REHABILITATION DIVISION

SERVICES were offered by the Rehabilitation Division to all patients of the provincial sanatoria again in 1952, thus making its contribution to the over-all program for tuberculosis control in Manitoba. The principles behind rehabilitation were given wider publicity through such organizations as the National Advisory Committee, of which Mr. Cunnings is a member, and the Health Division of the Welfare Council of Greater Winnipeg. With this help, the idea of the value of a rehabilitation program is gaining momentum and is reflected, in our own program, by the way in which ex-patients are being accepted in the labor field.

Our program of training in Manitoba enables the patient to acquire the abilities and skills desired by the employer and every successful placement thus made serves to show that the trained ex-patients can make a very worthwhile contribution to business and industry.

MANITOBA SANATORIUM

Once again, the complete rehabilitation services were capably supervised by Miss Margaret Busch. Miss Hazel Carlson and Miss Gertrude Manchester continued their duties as Institutional Instructors. Miss Manchester, who had been working part time only, moved to full-time status on November 15th.

Mrs. Alice Carragher, the Occupational Therapist, left the employ of the Sanatorium Board on March 31st to accept a similar position in Edmonton. On May 12th, Mrs. Carragher was replaced by Miss Ruth Davidson, a graduate in Home Economics of the University of Manitoba.

Another change in staff occurred when, on October 6th, Miss Mildred Johnston transferred her homemaking course to the Manitoba Sanatorium. Miss Johnston had been serving as Homemaking Instructor at the St. Boniface Sanatorium since the summer of 1951.

With the help of their instructors, the patients continued to show a great deal of interest in their studies and took advantage of the facilities available to them at the Sanatorium.

Patients receiving instruction in academic subjects, Grades I to XII	152
Total subjects completed	302
Patients receiving instruction in vocational subjects	81
Number of units completed	39
Patients engaged in Homemaking	96
Patients engaged in Occupational Therapy	153

One of the highlights of the year is reported by Miss Busch:

"The star pupil (at the Manitoba Sanatorium) was M.A., who graduated from Grade XII with an average of 83%, notwithstanding the fact that he had surgery during this time. He is currently enrolled in elementary bookkeeping, preparatory to an apprenticeship in accountancy after his discharge. . . . M. has taken full advantage of the opportunities for study and self-improvement here."

ST. BONIFACE SANATORIUM

The teaching staff underwent a change during the past year when Mrs. Hill, the instructor, left the Sanatorium in August. Her place was taken by Miss Jeanne Molin, an ex-patient who obtained her qualifications for the position through the education she was able to receive while confined to the hospital.

Mr. Alex Vermette continues to be employed at the Sanatorium as instructor in the workshop.

Patients receiving academic instruction	113
Patients receiving vocational instruction	35
Number of units of vocational work completed	16
Patients engaged in Occupational Therapy	200
Patients engaged in the workshop	105
Patients engaged in Homemaking	79

During the year a new workshop was opened on the fourth floor of the Sanatorium and this has provided better and safer facilities for the patients interested in wood and plastic work with power machines. Through the Sanatorium Board a band saw and jig saw were purchased in 1952, thus allowing the patients to turn out a finer type of work that was not possible with the older equipment.

KING EDWARD MEMORIAL HOSPITAL

Miss Gladys Motheral again served as Institutional Instructor and Occupational Therapist for the King Edward Memorial Hospital during the past year. She reports:

Patients receiving instruction in academic subjects	27
Patients receiving instruction in vocational courses	18
Units completed	12
Patients engaged in Occupational Therapy	145

BRANDON SANATORIUM

A precedent was set at Brandon in 1952 when two patients at the Sanatorium were enrolled in private high schools. One is attending Grade XII at Brandon College and the other Grade XI at United College in Winnipeg.

We extend our thanks to Mr. G. H. Marcoux of the Division of Indian Affairs and to Dr. W. J. Wood of the Indian Health Services for their interest and co-operation in this venture, and to Dr. A. H. Povah, Medical Superintendent, and Miss C. Fraser, academic instructor, whose sympathetic attitude towards patient rehabilitation problems made the project possible.

CLEARWATER LAKE SANATORIUM

At the Clearwater Lake Sanatorium a very useful procedure was instituted in 1952 by the Medical Superintendent, whereby each patient's rehabilitation routine, along with his or her name, is placed over the bed.

The in-sanatorium program of the division continued to operate efficiently under the supervision of Miss A. Marion, the academic instructor, and Mrs. P. Hill, the arts and crafts instructor. The wholehearted support and interest of Dr. S. Carey has done much to improve existing conditions.

DYNEVOR INDIAN HOSPITAL

Despite a fairly lengthy period during the past year when the patients at Dynevor were without an instructor, their interest in the rehabilitation services has remained at a high level and some very fine work in both the academic and arts and crafts fields has resulted. To Dr. W. Read, the Medical Superintendent, we extend our thanks for his support.

POST-SANATORIUM TRAINING

Excellent use was made of the Manitoba Technical Institute and, at present, five ex-patients are enrolled there for training. Those who during the year completed their work there have all since been placed in satisfactory positions. The Institute is a vital part of our program, for it is here that patients who have studied by correspondence while in sanatorium are able to apply the polish to their training.

Appreciation is extended to Miss S. Kilvert of the National Employment Service, who so capably arranges the initial enrolment at the Manitoba Technical Institute for all ex-patients.

JOB PLACEMENT

Generally, the past year was a satisfactory one in regard to the vocational rehabilitation of ex-patients. Continuous liaison work between this office and the National Employment Service has maintained a fairly high level of satisfactory placement. Also, either through previous training or training received in sanatorium, ex-patients are presenting a good standard of qualification to potential employers.

The most difficult placement to make continues to be the male patient in the 45 to 55 age group. The National Employment Service have very few calls for this type of untrained applicant, and it is becoming more necessary for this office to enter the placement field in an active role and arrange special placements for these people.

THE MESSENGER OF HEALTH

The Messenger of Health completed another year of continuous monthly publication. An increased circulation was recorded, together with a corresponding increase in the very important revenue section. A high standard of publication was maintained, to a great extent through the interest of our own professional personnel who have unhesitatingly provided articles of local and national interest. Several of these articles were reprinted in hospital magazines throughout Canada and the United States.

Our thanks to all those who have made the continued success of the Messenger possible.

APPRECIATION

We would like to extend thanks to the University of Manitoba, who graciously altered their correspondence training regulations to render them more suitable to our sanatorium study routine; and to St. Paul's College who arranged, through the University, for one of our patients to substitute a high school subject for one in the first year university course.

Appreciation is expressed for the untiring efforts of the staff of the Special Placements Section of the National Employment Service in the counselling and placement of our ex-patients, and to Mr. L. S. Smith and Mr. C. J. Hutchings of the Technical and Correspondence Branches of the Department of Education for their prompt handling of correspondence course applications.

The Rehabilitation Division has continued to function satisfactorily within the area of our own institution, largely through the co-operation of all personnel of the Sanatorium Board. To all in general then, may I express my gratitude and in particular to Dr. Paine, Dr. Sinclair and Dr. Campbell of the sanatoriums, and to Dr. Ross, Dr. Scott and Mr. Cunnings. Their help has been invaluable to me in the administration of the policies of the Division.

Respectfully submitted,
(Sgd.) E. G. METCALFE,
Director of Rehabilitation.

Records

CENTRAL TUBERCULOSIS REGISTRY

	Reported as: Whites		Indians		Eskimos	
	1951	1952	1951	1952	1951	1952
Patients on File, Dec. 31	**3,114**	**3,507**	**1,681**	**1,917**	**17**	**19**
Primary type	39	28	142	78	....	....
Re-infection type	3,075	3,479	1,539	1,839	17	19
Patients at Home						
Active pulmonary tuberculosis	239	200	73	89		
Of these, known to be bacillary	42	55	6	4		
New Cases diagnosed in Manitoba January 1—December 31	**806**	**686**	**199**	**231**	**9**	**2**
Primary type	23	22	28	25		
Re-infection type	783	664	171	206	9	2
Of these, New Active Cases—Classified	**333**	**368**	**169**	**182**	**8**	**2**
Primary type	23	22	28	25		
Re-infection type						
Minimal	105	93	41	42	2	1
Moderately advanced	50	66	30	30	1	
Far advanced	56	58	22	23	1	
Pulmonary tuberculosis, extent not stated	8	19	8	9		
Tuberculous pleurisy	28	32	9	13		1
Non-pulmonary tuberculosis	63	78	31	40	4	
New Diagnoses admitted to Sanatoria	263	241	75	134	6	1

STATIONARY AND TRAVELLING CLINICS AND SURVEYS

	Whites	Indians
EXAMINATIONS at all clinics and surveys, Jan. 1—Dec. 31, 1952	**197,292**	**13,193**
Stationary Clinics	11,266	59
Travelling Clinics	5,485	81
Surveys—in Manitoba	180,314	10,611
—outside Manitoba (Sanatorium Board)	227	2,442
NEW CASES of tuberculosis diagnosed at Clinics and Surveys	**513**	**108**
Stationary Clinics	178	12
Travelling Clinics	43	3
Surveys—Manitoba	292	93
Of these, new cases of Primary Infection Type	**15**	**14**
Stationary Clinics	11	1
Travelling Clinics	2	
Surveys—Manitoba	2	13
New Cases of Re-infection Type	**498**	**94**
Stationary Clinics	167	11
Travelling Clinics	41	3
Surveys—Manitoba	290	80
CONTACTS EXAMINED at clinics	**6,639**	**55**
Stationary Clinics	3,665	7
Travelling Clinics	2,974	48
OLD TUBERCULOUS PATIENTS REVIEWED	**5,408**	**485**
Stationary Clinics	3,949	7
Travelling Clinics	819	22
Surveys—Manitoba	640	456
Pneumothorax Treatments given at all stationary clinics	**5,335**	

INSTITUTIONAL STATISTICS

	Reported as: Whites		Indians		Eskimos	
	1951	1952	1951	1952	1951	1952
PATIENTS IN SANATORIA as at December 31	**630**	**615**	**495**	**478**	**13**	**13**
PATIENTS ADMITTED to Sanatoria						
January 1 to December 31	896	791	392	395	8	5
Tuberculous patients admitted	794	711	240	304	6	1
First Admissions	**321**	**296**	**149**	**198**	**6**	
Primary Type	14	9	17	23		
Re-infection type:						
Minimal	105	79	37	40	2	
Moderately advanced	71	67	36	49		
Far advanced	66	64	32	37	1	
Tuberculous pleurisy	23	29	2	9		
Non-pulmonary tuberculous	42	48	25	40	3	
Re-admissions	**337**	**328**	**73**	**91**		**1**
Primary type	1		1	1		
Re-infection type:						
Minimal	49	52	18	18		
Moderately advanced	108	90	24	38		
Far advanced	137	151	17	17		
Tuberculous pleurisy	5	3	1	3		
Non-pulmonary	37	32	12	14		1
Patients admitted for review	**136**	**87**	**18**	**15**		
TUBERCULOUS PATIENTS **Transferred**	**279**	**236**	**199**	**125**		**1**
PATIENTS DISCHARGED from Sanatoria January 1 to December 31	**955**	**817**	**432**	**412**	**8**	**5**
Tuberculous patients discharged	**851**	**734**	**292**	**320**	**6**	**2**
Discharged after review	134	87	14	14		
Discharged with inactive tuberculosis	66	96	113	118	3	
Discharged with arrested tuberculosis	209	249	64	114		2
Discharged with act. imp. tuberculosis	294	180	50	34	1	
Discharged with act. unimp. tuberculosis	78	76	13	14		
Discharged dead	70	46	38	26	2	
Discharged against medical advice	62	91	12	13		

BALANCE SHEET as at 31st DECEMBER, 1952

MANITOBA SANATORIUM, CENTRAL TUBERCULOSIS CLINIC AND SPECIAL FUNDS

ASSETS

	Manitoba Sanatorium	Central Tuberculosis Clinic	
Cash on Hand and in Bank	$ 3,290.88	$ 5,667.82	$ 8,958.70
Accounts Receivable:			
Provincial Government:			
Municipal levy	33,070.76	3,965.50	
Grant to tuberculosis institutions	9,972.00	2,546.00	
Special grant	10,681.65	—	
Municipalities, etc., treatment	28,233.05	5,838.40	
Other	5,907.28	5,835.07	
	$ 87,864.74	$ 18,184.97	$106,049.71
Bequests:			
Estate John Yellowlees, deed of land	1.00		1.00
Inventories and Deferred Charges:			
Supplies on hand, per Schedule "1"	44,617.18	6,785.06	
Deferred charges	3,660.88	207.06	
	48,278.06	6,992.12	55,270.18

	Cost	Depreciation Reserve	Book Value	
Land, Buildings, Plant and Equipment:				
Land and improvements	$ 10,852.71	$ —	$ 10,852.71	
Buildings	634,649.16	492,591.52	142,057.64	
Plant & machinery, heating, lighting, water & sewer	133,317.91	95,648.37	37.669.54	
Furniture	24,746.48	16,614.10	8,132.38	
Equipment	79,464.22	64,474.32	14,989.90	
Laundry equipment	9,401.46	2,497.07	6,904.39	
Automobile	2,288.42	1,178.98	1,109.44	
Horses, harness, etc.	1,572.39	1,572.39	—	
Spur track	700.85	700.85	—	
Fire equipment	3,911.82	3,911.82	—	
Fire protection reservoir	12,304.27	5,167.72	7,136.55	
	913,209.69	684,357.14	228,852.55	
Furniture and equipment Central Tuberculosis Clinic	1,923.43	478.03	1,445.40	
	$915,133.12	$684,835.17		230,297.95

General Account:			
Federal health grant	$ 17,305.10		
Provincial Government:			
Municipal levy	67,433.06		
Other	3,012.75		87,750.91
Endowment Fund No. 1:			
Cash in bank	590.13		
Investments at par, Schedule "6"	104,955.00		
Accrued interest on investments	918.30		106,463.43
Endowment Fund No. 2:			
Cash on hand and in bank	80,032.87		
Accounts receivable:			
Dept. of National Health and Welfare, Indian health services	4,433.71		
Federal health grant	1,573.38		
Other	941.05		
Investments at par, Schedule "6"	8,000.00		
Accrued interest on investments	28.20		
Inventories and deferred charges	1,290.03		
Fixed assets:			
Vehicles and mobile units	$ 23,415.52		
X-Ray and similar equipment	40,551.98		
Furniture and other equipment	13,344.72		
	77,312.22		
Less: Reserve for depreciation	68,513.36	8,798.86	
Contributed capital assets, Federal health grant	32,404.95		
Less[1] Reserve for depreciation	32,404.95		105,098.10
Employees' Emergency Fund No. 1:			
Cash in bank	1,127.74		
Investments at par, Schedule "6"	17,000.00		
Accrued interest on investments	104.22		18,231.96
Employees' Emergency Fund No. 2:			
Cash in bank			81.08
Building Fund:			
Cash in bank			23.50
			$718,226.52

LIABILITIES

	Manitoba Sanatorium	Central Tuberculosis Clinic	
Accounts Payable:			
Trade accounts	$ 23,993.10	$ 4,767.59	
Other	2,431.97	4,900.07	
Accrued wages	7,228.58	3,827.92	
Accountable supplies	—	2,212.54	
	33,653.65	15,708.12	$ 49,361.77
Patients Store and Contingent Account, Schedule "3"	1,199.30		1,199.30
Capital Surplus, Schedule "7"	70,096.52		70,096.52
Surplus:			
Balance at 31st December, 1951	254,823.49	15,306.40	
Add: Contributed capital assets,			
—Federal health grant	373.34		
—Endowment No. 1 and Building Fund grants	5,634.04		
Revenue adjustments, prior years	90.00	151.40	
Prior years' reserve for inventories written off	2,860.65		
Excess of revenue over expenditure, Exhibit "B"	24.98	655.65	
	$263,806.50	$ 16,113.45	279,919.95

General Account:			
Overdraft at bank		$ 17,318.85	
Municipal levy		64,559.46	
Reserve for unpaid levy		2,872.60	
Undistributed statutory grant		3,000.00	87,750.91
Endowment Fund No. 1:			
Capital account, Exhibit "C"		106,463.43	
			106,463.43
Endowment Fund No. 2:			
Accounts payable		10,960.68	
Accrued wages		2,371.44	
Capital account, Exhibit "C"		91,765.98	
			105,098.10
Employees' Emergency Fund No. 1:			
Capital account, Exhibit "C"		18,231.96	
			18,231.96
Employees' Emergency Fund No. 2:			
Capital account, Exhibit "C"			81.08
Building Fund:			
Capital account, Exhibit ' C"			23.50
			$718,226.52

D. L. MELLISH
Chairman of the Board

T. A. J. CUNNINGS
Executive Director and Sec.-Treas.

10th February, 1953.

The Chairman and members, The Board of Trustees,
Sanatorium Board of Manitoba, Winnipeg, Manitoba.

We have completed an examination of the books and accounts of Manitoba Sanatorium, Central Tuberculosis Clinic and Special Funds for the year ended 31st December, 1952. Our examination was made in accordance with generally accepted auditing standards and included such tests of the accounting records and other auditing procedures as we considered necessary in the circumstances.

The accounts do not include any provision for interest on capital invested. With minor exceptions, depreciation has been provided only on those assets acquired since 1946.

We have obtained all the information and explanations we have required and, in our opinion, the attached Balance Sheet, Exhibit "A", is properly drawn up so as to exhibit a true and correct view of the state of affairs of Manitoba Sanatorium, Central Tuberculosis Clinic and Special Funds as at 31st December, 1952, according to the best of our information, the explanations given to us and as shown by the relative records.

RIDDELL, STEAD, GRAHAM & HUTCHISON,
Chartered Accountants, Auditors.

Thank You

THE SANATORIUM BOARD EXTENDS SINCERE THANKS TO:

THE PUBLIC

In the words of the Chairman:

"Essentially, the success of our effort to eradicate tuberculosis in this province rests on the interested and loyal support of thousands of citizens in all parts of the province who contribute substantially of their time and money. We are very grateful for their generous interest and support.

"I should like to extend our appreciation to municipal officials, the clergy, teachers, the Central Volunteer Bureau in Winnipeg, women's organizations throughout the province, newspaper editors, radio station executives and community leaders everywhere who join in organizing, publicizing and advancing our preventive services.

"Special thanks are extended to members of the Associated Canadian Travellers at Winnipeg and Brandon, and to the officers of radio stations CJOB and CKX who again in 1952 have contributed generously of their time and effort to assist the Board, with great benefit to all the citizens of Manitoba. We extend our thanks and best wishes to the scores of people who contribute from their talent to make the Travellers' concerts a success. And we are grateful for the interest and co-operation of all those who support the amateur contestants and through their contributions pay for many thousands of free chest X-ray examinations that prevent many illnesses and save many lives."

AND TO THOSE NAMED BELOW, IN RESPECT TO THE INSTITUTIONS THEY HAVE HELPED:

MANITOBA SANATORIUM

Clergy

Belmont: Rev. George Ebsary, Anglican Church—**Brandon:** Rev. Father Borys, Greek Catholic Church—**Dunrea:** Rev. Father Bertrand, Roman Catholic Church—**Ninette:** Rev. T. A. Payne, United Church—**St. Boniface:** Rev. Father R. Beaulieu, O.M.I.

Entertainment

Brandon: Brandon Musicians' Association; St. Paul's United Church Young People's; Salvation Army Band—**Deloraine:** United Church Choir—**Margaret:** Young People's Club—**Winnipeg:** The Army, Navy and Air Force Band.

Flowers

Belmont: Mr. Walter Sykes—**Carman:** The Strachan Seed Company—**Killarney:** Dr. J. Dickson and Church of England—**Ninette:** W. B. Stewart; Mrs. J. Paskewitz; Mrs. Jim Wright.

Other Gifts

Winnipeg: Agenda Service Club; Mr. A. H. Brown; Canadian Legion; Canadian Red Cross; Rev. W. H. Davis; Department of Veterans' Affairs; Engineers' Wives' Association; Gideon Bible Society; Jewish Child and Family Service; Ladies' Auxiliary Canadian Legion; Ladies' Auxiliary Associated Canadian Travellers; H. L. MacKinnon Co. Ltd.; Mallabar's Costume Ltd.; G. S. Miller; Ogilvie Flour Mills; Simmons Limited; Mr. J. W. Speirs; Women's Air Force Auxiliary.
Anonymous—**Baldur:** Grund Ladies' Auxiliary; Women's Auxiliary, Canadian Legion—**Brandon:** Brandon Busy Bees; Ladies' Auxiliary, Associated Canadian Travellers—**Carman:** Albert Cooper Club; Mr. and Mrs. J. W. Bridge; Neil Love; A. Malcolmson—**Hartney:** Mrs. H. C. Batty—**Estevan, Sask.:** Mrs. Elsie Littler—**Killarney:** J. F. Campbell—**Ninette:** Dugald Rankin; Women's Auxiliary, Canadian Legion—**Ninga:** Ninga Community Club—**Reston:** Colin S. Campbell—**Rounthwaite:** Miss Georgina McPherson—**Vancouver, B.C.:** Hugh McConnell—**Whitehorse, Yukon Territory:** Southern Yukon Tuberculosis Association.

BRANDON SANATORIUM

Clergy

Brandon: Archdeacon H. E. Bridgett; Rev. W. O. Nugent; Canon F. G. Ongley; Rev. B. O. Whitfield—**St. Boniface:** Rev. R. Beaulieu, O.M.I.

Gifts

Brandon: Brandon Hills Mission Band; Cub Pack; Canadian Legion; Chamber of Commerce; T. Eaton Company Limited; First Church United Mission Band; I.O.D.E.; Johnson's Hardware Co. Ltd.; Ladies' Auxiliary, Associated Canadian Travellers; Manitoba Power Commission; Order of the Royal Purple; Salvation Army; S.P.E.B.S.Q.S.A.; St. George's Women's Auxiliary; St. Matthew's Women's Auxiliary; Twenty-Sixth Field Regiment, R.C.A. Armories; Mr. and Mrs. W. Wightman; Willson's Stationery Company Limited.
Winnipeg: Employees' Charitable Fund, T. Eaton Co. Ltd.
Carberry: Calvary Pentecostal Church—**Justice:** Mrs. G. Powell—**Kenora:** Cecilia Jeffrey Indian Residential School—**McIntosh, Ont.:** McIntosh Indian Residential School—**Norway House**—United Church Women's Auxiliary—**Varsity View:** Charleswood Red Cross—**Whitehorse, Yukon Territory:** Mr. C. S. McPherson.

CLEARWATER LAKE SANATORIUM

Clergy

H.E. Most Reverend Bishop Martin Lajeunesse, O.M.I., Vicar Apostolic of Keewatin; Rev. L. Poirier, O.M.I.; and the Roman Catholic Missions throughout the North—**Flin Flon:** Ven. Archdeacon R. B. Horsefield—**The Pas:** Rev. Aitkin Harvey, United Church; Rev. C. L. Morgan, Anglican Church; Rev. R. Milburn, Devon Mission; Captain Pamphlin, Salvation Army—**Sturgeon Landing, Sask.:** Rev. Father Giard, O.M.I.

Gifts

Flin Flon: Mrs. D. A. Biggs; Members of the Birchview Sunday School; Mr. Breen; Mrs. E. M. Hamilton; Ross Lake Brownie Pack 3; Ross Lake Sunday School; Miss Smith; F. Willis.
The Pas: Hayes' Funeral Home; Rotary Club.
Winnipeg: Canadian Save The Children Fund; Employees' Charitable Fund, The T. Eaton Co. Ltd.; The Imperial Tobacco Company.
Birch River: Birch River Anglican Sunday School—**Clearwater Lake:** Mrs. W. Hollinger—**Mafeking:** Miss C. Adams—**Oberon:** Mrs. T. H. Martin; Miss Maxine Thorn—**Sandy Bay:** Sandy Bay Community Club—**Saskatoon, Sask.:** Mr. J. MacMillan.

DYNEVOR INDIAN HOSPITAL

Clergy

Selkirk: Rev. T. C. B. Boon, St. Peter's Anglican Church; Rev. Walter G. Crane, Selkirk United Church; Ven. Archdeacon R. N. R. Holmes, Christ Church (Anglican).
St. Boniface: Rev. Fr. Romeo Beaulieu, O.M.I.—**Winnipeg:** Rev. Burton Thomas, St. Matthew's Anglican Church.

Gifts

Selkirk: Christ Church Choir; Civic Employees' Union; Mr. Ken Davidson; Grade V Pupils, Daerwood School; Master Vernon Gunter; Kinsmen Club; Little Britain Chapter, I.O.D.E; Lord Selkirk Chapter, I.O.D.E.; P.E.O. Sisterhood; Selkirk Beverage Co.; S.O.S. Store.
Winnipeg: Mr. C. E. Drewery; Employees' Benevolent Club, T. Eaton Co. Ltd.; Lord Wolseley School; H. L. MacKinnon Co.; Phalanyx Fraternity, Y.M.C.A.
Alameda, Sask.: United Church Sunday School—**Bissett:** Bissett United Church W.A.—**East Kildonan:** Cubs, East Kildonan School—**Grand Marais:** Mrs. T. J. Powell—**Petersfield:** Norwood Anglican Church.