Tuberculosis CONTROL *in Manitoba* 1953

Issued June, 1954

Annual Report
of the
SANATORIUM BOARD *of* MANITOBA

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
1953

WINNIPEG, MANITOBA

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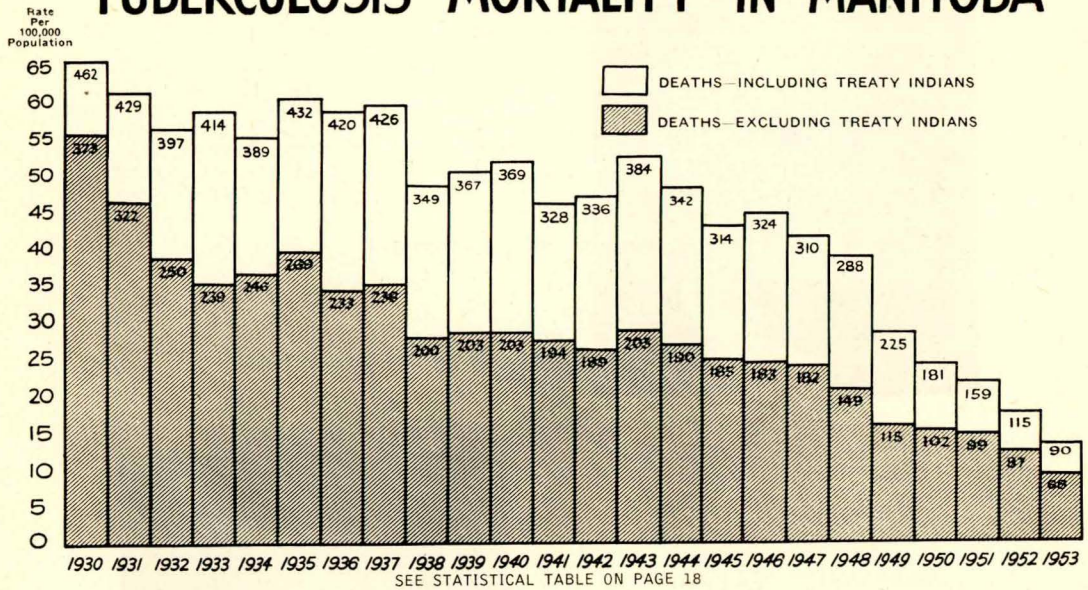
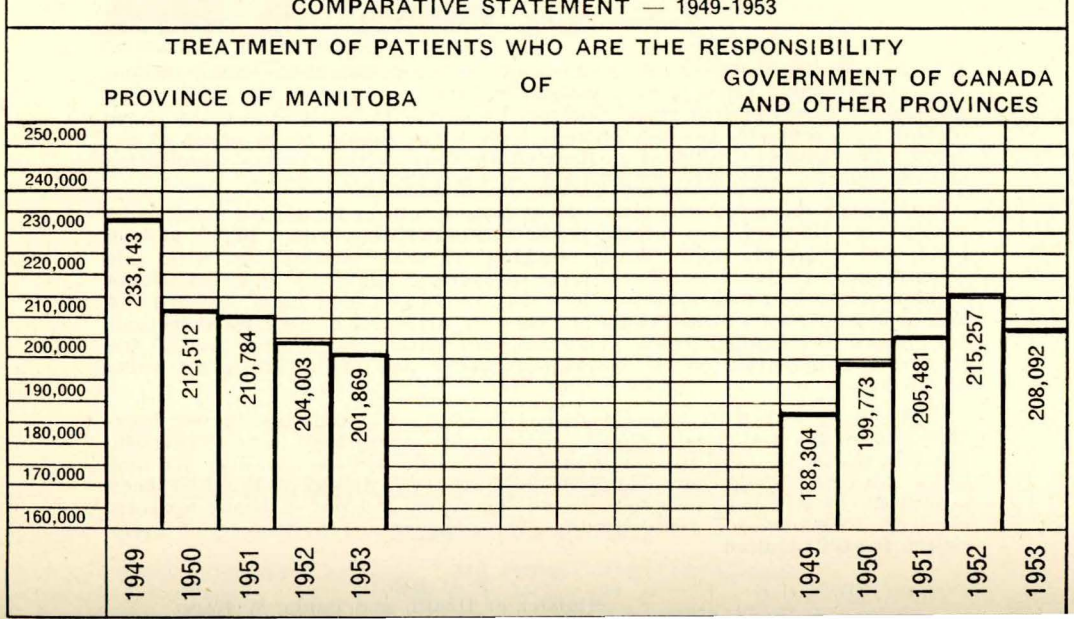
TUBERCULOSIS MORTALITY IN MANITOBA

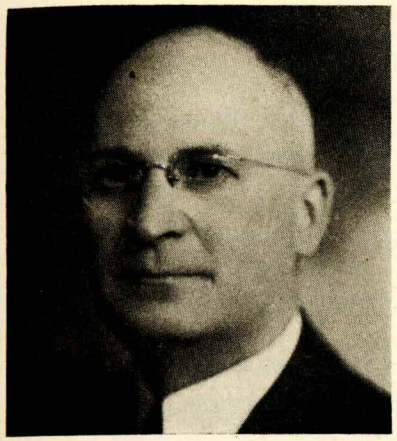


SEE STATISTICAL TABLE ON PAGE 18

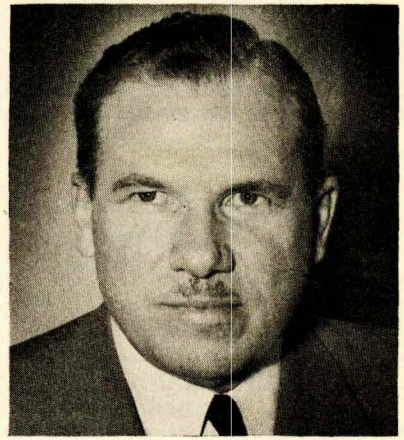
	1943	1953
CASES under supervision in Manitoba	4,322	4,378
EXAMINATIONS	28,970	313,212
NEW CASES diagnosed Active	485	555
Inactive	231	394
	716	949
DEATHS	384	90

TUBERCULOSIS SANATORIA — TREATMENT DAYS
COMPARATIVE STATEMENT — 1949-1953





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



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

ONE cannot read the various sections of the report herein presented without experiencing a sense of deep satisfaction and gratitude for the work of the Sanatorium Board of Manitoba. Continued progress is recorded in every phase of this vast problem, and our citizens have every reason to be proud of the accomplishments of the Board, in their efforts towards the eventual eradication of tuberculosis.

Although supported to a large extent by government funds, the Sanatorium Board is a voluntary body of able public spirited citizens with a highly skilled, loyal and energetic staff. While working in close co-operation with this Department, the Board is given a large measure of autonomy in directing and administering their program. I believe that herein lies their great strength and and opportunity for service which has been so strikingly demonstrated in their past record of accomplishment. This has been made possible only through the continued co-operation of the medical profession and the public in all walks of life.

The death rate from tuberculosis has reached an all-time low for our province, and for the first time in our history, we have empty beds in our Sanatoria. But this should not lead to complacency because there were still over 500 new cases discovered last year in Manitoba, most of which could have been prevented. There can, therefore, be no relaxation and our vigorous program must be continued for years ahead. The support and assistance of every citizen is still required.

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

SANATORIUM BOARD OF MANITOBA - 1953

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. F. C. BELL DR. M. R. ELLIOTT DR. C. R. DONOVAN MR. G. D. ILIFFE, C.A. HON. R. T. TURNER
As Municipal Commissioner	HON. E. PREFONTAINE
Representing Union of Manitoba Municipalities	MR. R. BARRETT MR. OSWALD MCKAY REV. H. L. HENDERSON
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. J. 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 1953

Chairman	MR. JUSTICE J. T. BEAUBIEN
MR. E. CASS	MR. G. P. JESSOP
MR. A. MONNIN	MR. NOEL VADEBONCOEUR
MR. E. BOLE	MR. R. MEISNER
MR. E. DUHA	

Winnipeg Municipal Hospitals

KING EDWARD MEMORIAL HOSPITAL

Commissioners 1953

ALD. GEORGE E. SHARPE (Chairman) MR. PETER CORNES (Vice-Chairman)
MR. A. J. ROBERTS ALD. H. V. MCKELVEY ALD. PETER TARASKA

MEDICAL STAFF, 1953

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. E. MORIGI

MANITOBA SANATORIUM

Medical Superintendent and Chief Surgeon — DR. A. L. PAINE
Assistant Surgeon — DR. W. ZAJCEW
Medical Assistants — DR. PAUL MARI; DR. M. ATKINSON

DYNEVOR INDIAN HOSPITAL

Medical Superintendent — DR. W. W. READ

BRANDON SANATORIUM

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

CLEARWATER LAKE SANATORIUM

Medical Superintendent — DR. S. L. CAREY
Medical Assistant — DR. F. P. HULKE
Medical Assistants (Internes) — DR. E. C. MUEHLENBECK; DR. T. MISHIMA; DR. R. BURMEISTER

St. Boniface Sanatorium

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

King Edward Memorial Hospital

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

MEDICAL CONSULTANTS, 1953

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); (The Pas) C. S. CRAWFORD, M.D., Cert. Gen. Surg. (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 — S. C. WINDLE, M.D.
Pathology — 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. J. D. ADAMSON

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

NON-MEDICAL SENIOR STAFF, 1953

	SUPERINTENDENTS OF NURSES	BUSINESS OFFICERS	CHIEF ENGINEERS
...ral ...orium Board Manitoba	.....	John Mack (*Chief Accountant*) Edward Dubinsky (*Administrative Asst.*)	.....
...tment ...al Tuberculosis	Miss N. Anderson, R.N.	F. A. Day (*Acct.*)	.....
...toba Sanatorium	Miss I. Duncan, 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
...vor Indian Hospital	Miss A. Stefanson, R.N.	.....	.....
...don Sanatorium	Mrs. I. A. Cruikshank, R.N.	G. R. Gowing (*Business Manager*) R. B. Scott (*Accountant*)	R. N. Newman
...water Lake ...atorium	Miss D. Ellis, R.N.	C. C. Christianson (*Business Manager*) T. W. Rudachyk (*Accountant*)	P. E. Johnston

St. Boniface Sanatorium

SUPERIOR ..... Rev. Sr. Cecile Maurice, R.N.
1ST ASSISTANT ..... Rev. Sr. Eugenie Choquette, R.N.
2ND ASSISTANT ..... Rev. Sr. Ste. Sabine, R.N.
CHAPLAIN ..... Right Rev. Mgr. L. Primeau

Rev. Sr. E. Choquette, R.N. (*Director of Nursing*) Rev. Sr. B. Patry, R.N. (*Night Supervisor*)	Rev. Sr. V. Rheaume (*Sec. Treasurer*) Rev. Sr. J. Valois (*Purchaser*)	N. Pelletier

King Edward Memorial Hospital

ADMINISTRATOR ..... John M. McIntyre
ASSISTANT ADMINISTRATOR ..... Arthur Hodgkinson

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

...ention

Travelling Tuberculosis Clinics and Surveys ..... Organizer, Community Surveys ..... Wm. L. Rutledge, Ph.D.
Organizer, Industrial Surveys ..... J. J. Zayshley, R.T.

...mployment

Rehabilitation ..... E. G. Metcalfe, B.A. (*Director of Rehabilitation*)

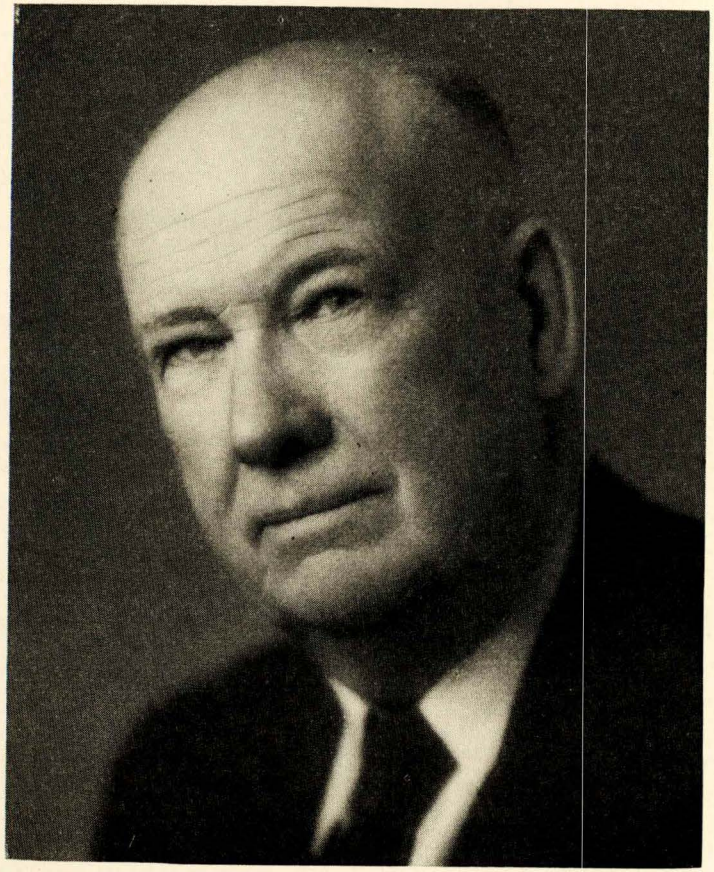
...rds

Central Tuberculosis Registry ..... Miss Elsie J. Wilson, R.N. (*Supervisor*)

NON-MEDICAL SENIOR STAFF, 1953

RADIOGRAPHERS	LABORATORY TECHNICIANS	TEACHERS	OTHERS
W. J. Anderson, R.T.	.....	.....	Mrs. E. J. Fehr (*Sec. to Exec. Dir.*) Miss Nan T. Chapman (*Supervising Dietitian*)
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 G. Manchester Mr. Guy Hamel Miss M. E. Johnston (*Homemaking Instruc.*)	Miss G. M. Wheatley (*Sec. to Med. Supt.*) Miss J. Romanson (*Food Supervisor*) F. J. Rodwell (*Laundry Foreman*)
.....	.....	Mrs. P. Beauchemin, M.A.	Mrs. L. Paradoski (*Sec. to Med. Supt.*)
F. H. Gibson, R.T.	Miss. L. E. Delamater, R.T.	Miss M. Morris Mrs. J. Deroche Mrs. V. Davidson (*Occup'l Therapist*)	Miss G. M. Hutton (*Sec. to Med. Supt.*)
John Kaczoroski, R.T.	Miss P. M. Sismey	Miss A. Marion Miss O. Kischook (*Occup'l Therapist*)	Miss M. L. Baudru (*Sec. to Med. Supt.*) R. B. Lock (*Laundry Foreman*)
Rev. Sr. E. Choquette, R.N. (*O.R. and X-Ray Supervisor*)	Rev. Sr. A. Drouin, R.N. (*Lab. Supervisor*) Rev. Sr. A. Doyon, R.N. (*Pharmacist*)	Miss E. G. Swatland, R.N. (*Occup'l Therapist*) (*Teacher-Adult Pts.*) Miss G. Hornick (*School Teacher*) Mr. Alex Vermette (*Crafts Instructor*)	Rev. Sr. A. Boulet (*Main Kit. Super.*) Mrs. H. Pietuchow (*Soc. Worker*) Miss D. Flatt (*Dietitian*) Mrs. Ivy Hodgkins, R.N. (*Chief Housekeeper*)
Miss M. T. Briggs	Miss M. Wiseman Miss K. Nagy Miss E. Pullan Miss S. MacDonald Miss S. Campbell	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. Therese Fraser (*Secretary*) Miss Gladys McGarrol (*Senior Statistical Clerk*)

In Memoriam



David L. Mellish

Died April 25th, 1954

Member of the Board — 1928 - 1944
Chairman, Administration Committee — 1944 - 1949
Chairman of the Board — 1949 - 1954

David L. Mellish

David L. Mellish first became interested in Manitoba Sanatorium some thirty years ago when he drove over from his home at Pipestone to visit the institution with the Honorable Robert Forke.

Representing the Union of Manitoba Municipalities, he became a statutory member of the Sanatorium Board of Manitoba in 1928. When his term with the Municipal organization ended he continued his association as an elected member of the Board, becoming Chairman of the Administration Committee in 1944, Vice Chairman in 1947 and Chairman in 1949.

Mr. Mellish brought to the direction of the Board's affairs a high sense of responsibility and wisdom born of long experience in public business. He set an example of probity and virtue that was an inspiration to all with whom he was associated. Nevertheless his counsel was tempered always by sympathy and understanding, marked by a quiet humor and ready wit, giving guidance and strength in meeting every situation.

He was a friend to all associated with the Sanatorium Board of Manitoba. He will be greatly missed, and remembered with affection.

REPORT OF THE CHAIRMAN

For the Year Ended December 31, 1953

GENTLEMEN:

It is with much pleasure that I welcome you today to this, the forty-third annual meeting of the Sanatorium Board of Manitoba.

Last Friday detailed reports were presented to the Board by 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.

These reports together with those you will hear today give a detailed and impressive account of the breadth and scope of the campaign against tuberculosis in this Province, and the vigour and effectiveness with which it is being carried forward.

THE BOARD

The Board, at the present time is composed of twenty-nine members of whom seventeen are elected and twelve are statutory members, and all of whom contribute their services on a voluntary basis. During the year the Board received with regret the resignation of Mr. H. A. Greeniaus, Assistant to the Vice-President of the Canadian Pacific Railway, who was transferred by his Company to Montreal. Mr. Greeniaus was first elected to the Board in 1945. He has displayed great interest in the work of the Board during his more than eight years of association with it, and we are very grateful for the advice and assistance which he rendered on so many occasions.

The seven standing committees of the Board, acting under their respective Chairmen, met regularly throughout the year to provide a continuous review and consideration of all aspects of the Board's business. During 1953 there were forty-five meetings of the Board or its Committees. I wish to record my sincere thanks and appreciation for the conscientious and capable consideration given by the Committee Chairmen and members, to all the varied proposals and problems that have been brought before them for decision throughout the year.

THE PROGRAM

The Tuberculosis Control Act assigns to the Board responsibility for the care of those persons in Manitoba who may require treatment for tuberculosis, and the establishment of such measures as may be deemed necessary to prevent and minimize the development of the disease. In the fulfillment of these responsibilities, every effort has been made to utilize all accepted methods and procedures that will best achieve our objective, at the same time observing sound principles and proper economy in management. A comprehensive report of the measures that have been taken will be given to you in other reports and I shall consequently not deal with them in detail.

The Board has continued to improve the buildings and equipment at all the Sanatoria. This year an especially large program of modernization and improvement of the plant was carried out at Manitoba Sanatorium and I should like especially to express our grateful appreciation to the Minister, The Honorable F. C. Bell, for his support in carrying out this important work.

FINANCE

For 1953 a major change in policy occurred with regard to financing tuberculosis treatment, under which the Province assumed full responsibility, relieving the cities of the statutory payment formerly required of them and relieving the municipalities of the Municipal Commissioner's Levy for tuberculosis control. This has saved the municipal taxpayer some $420,000 in 1953 alone.

The National Health Grants have continued to play an important part in supplementing, extending and improving the Tuberculosis Control Program. Since 1948, when the Grants were established more than three-quarters of a million dollars have been made available in Manitoba from the National Health Grant to support new and additional anti-tuberculosis measures. The Board is extremely appreciative of the far-sighted policy which motivated these Tuberculosis Control Grants, and we are grateful for the co-operation and assistance of the Minister and Officers of the Department of National Health and Welfare at Ottawa in dealing with the projects submitted from time to time by the Board through the Provincial Minister of Health and Public Welfare.

CONTRIBUTED FUNDS

Contributions to the Christmas Seal Fund totalled $125,054 in 1953, an increase of $4,968 over the previous year. In addition the Associated Canadian Travellers turned over to the Board $20,850 to assist in financing the Preventive Campaign. All these contributed funds are used solely for preventive, educational and rehabilitation services. In recent years some assistance for preventive measures and rehabilitation services has been available through the National Health Grants but these Grants are limited to new or extension services only and consequently the contributed funds continue to be the main support for this part of the work. Outstanding, of course, is the financing of the Community Chest X-ray Surveys, which provided free chest X-ray examinations for nearly 215,000 persons in 1953 alone.

In addition to contributions to the Christmas Seal Fund, from time to time the Board receives special gifts from interested persons or bequests from the estates of those persons who wish to leave a memorial that will provide lasting assistance to our work. These gifts are maintained in an Endowment Fund which is used as necessity requires to fulfill special needs at Manitoba Sanatorium, providing facilities and benefits which cannot be financed from ordinary revenues of the institution and adding greatly to the welfare of the patients and the advancement of the work. The donors of $500 or more are listed on a permanent Memorial Page in our published Annual Report. We are deeply appreciative of all those who have assisted us in this way.

RESULTS

In his report, The Medical Director, Dr. Ross, will give you a detailed account of the results of the work during the past year. I would like to emphasize, however, that for the second consecutive year the death rate has fallen by approximately 25%. For the first time in the history of the Province fewer than 100 persons died from tuberculosis in one year. In considering the magnitude of this achievement it is interesting to look back and note that in 1930 there were 462 deaths; in 1935, 432 deaths; in 1940, 369 deaths; and in 1945, 314 deaths.

Against this hopeful fact one must point out that even last year there were 511 new cases of tuberculosis diagnosed in the Province and we can by no means afford to relax our efforts. We appear to be fighting a winning battle, but victory has by no means been achieved.

APPRECIATION

The Board has continued to have the service of a loyal and devoted staff. Each one, in whatever department employed, has an important part in the accomplishments of the year and we are deeply appreciative of their highly commendable service.

In closing I should like to record our grateful thanks for the continued confidence and support of the Minister of Health and Welfare and his colleagues in the Provincial Government, and their understanding of our needs and problems; for the interest and support of Municipal officials throughout the Province; for the mutually helpful relations we continue to enjoy with officers of the Winnipeg Health Department and Provincial Health Units; and for the co-operation and assistance of the officers of the associated Sanatoria, and general hospitals throughout Manitoba.

Respectfully submitted,
D. L. MELLISH,
Chairman of the Board.

CUNNINGS

REPORT OF THE EXECUTIVE DIRECTOR

I AM pleased to present to you an administrative summary of the operations of the Sanatorium Board of Manitoba for the year ended December 31st, 1953.

ASSETS AND LIABILITIES

At December 31st, 1953, 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 $1,962,848. Liabilities, not including reserves, totalled $485,515. Bank loans at the year end totalled $157,800, of which $50,000 represents a special laundry loan for construction and equipment at Ninette, $92,065 loans in connection with Manitoba Sanatorium and Central Tuberculosis Clinic pending receipt of funds from the Government, $12,509 an advance pending reimbursement of Federal Health Grant disbursements and $3,225 on current account at Clearwater Lake Sanatorium.

Combined operations of Manitoba Sanatorium and the Central Tuberculosis Clinic showed an excess of expenditure over income for the year of $20,399. Net working capital showed a decrease of $80,832 due to laundry extension cost, other equipment purchases and the operating deficit.

CAPITAL EXPENDITURES

The program of renovation and improvement at Manitoba Sanatorium was continued in a substantial way during the year. Centralization of the food services, including establishment of a staff and ambulant patient cafeteria, replacement of obsolete kitchen equipment and the conversion of five diet kitchens into two bed wards was completed at a cost of $54,092. The laundry was extended and some obsolete equipment replaced at a total cost of $55,376. Two boilers in the original power house installation, now condemned by the Inspectors, were replaced with a single water tube boiler at a cost of $43,151. Construction was started on an addition to the Nurses' Home that will provide fifteen single rooms of modern standard, to compensate for the marked deficiency in this type of accommodation that has accentuated the problem of obtaining and retaining nursing staff. At Brandon Sanatorium a second oil burner was installed at a cost of $3,649 and an improved medical conference room was constructed. All the property and equipment in each institution has been fully maintained with repair, replacement, improvement and redecoration being carried out as required.

INCOME

A major change in the financing of tuberculosis treatment was brought about by the Province of Manitoba undertaking to pay at a rate of $4.10 per day for patients, with payment by cities and municipalities, and the Provincial Statutory Grant, being discontinued. Treatment days for patients who are the responsibility of the Province totalled 201,869, a reduction of 2,134 days as compared to 1952. All tuberculosis treatment days in the Province totalled 409,961, a reduction of 9,299 as compared to the previous year. This continues the reduction in tuberculosis treatment days that has been noted since 1949. Reduction in treatment days at Manitoba Sanatorium of 5,064 and at the Central Tuberculosis Clinic of 1,425 accounts for the deficit noted previously on operation of these institutions.

SANATORIUM COSTS

With the exception of Dynevor Indian Hospital the cost trend continued upward in 1953, the changes being as follows:

Trend of Per Diem—1953

Brandon Sanatorium—increase 49c per patient day to $5.23.
Central Tuberculosis Clinic—increase 94c per patient day to $6.91.
Clearwater Lake Sanatorium—increase 25c per patient day to $5.54.
Dynevor Indian Hospital—decrease 60c per patient day to $4.49.
Manitoba Sanatorium—increase 43c per patient day to $5.39.

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

The sharp decrease in cost noted at Dynevor Indian Hospital is mainly accounted for by increase of the 1952 costs due to special maintenance expense in that year, and a higher occupancy in 1953. General costs were increased mainly due to upward revision of salaries, but the per diem costs at Brandon Sanatorium, Manitoba Sanatorium and the Central Tuberculosis Clinic are also affected by a lower occupancy.

The total operating expenditures for treatment and preventive services in the institutions and departments operated directly by the Board amounted to $1,599,116 in 1953.

Again in 1953 there was a slight reduction in average raw food costs, of 46 cents per meal. During the year 1,071,606 meals were served to patients and resident staff at a food cost of $277,514, a reduction of $23,526 from the previous year.

Total expenditure for fuel and heating services at $55,282 showed an increase of $1,062 compared to the previous year. Laundry services cost $49,373, a decrease of $521 from 1952. The diesel electric plant operated at Clearwater Sanatorium has continued to supply both the hospital and the airport with power. During the year 769,285 kilowatt hours were produced at an average cost of 3.3c per kilowatt hour. This is an increase of 47,685 kilowatt hours over 1952. The increase in electric power consumption has occasioned some concern over the capacity of the plant to carry a continually increasing load.

PREVENTIVE SERVICES

During 1953 expenditure on preventive services totalled $157,672, including

Chest X-ray Surveys (Community and Industrial)	$ 88,069
Chest X-rays for patients admitted to general hospitals	68,145
B.C.G. Vaccinations	1,458
	$157,672

Average cost of taking X-ray survey films was reduced from 29.86c in 1952 to 27.81c in 1953.

INVENTORIES

At December 31st, 1953, supplies on hand including commissary stores, engineering and maintenance supplies, fuel, diesel fuel oil, bunker fuel oil, and miscellaneous supplies totalled $113,485, a decrease of $4,626 from the year previous. All inventories are valued at cost and all the materials are in current demand.

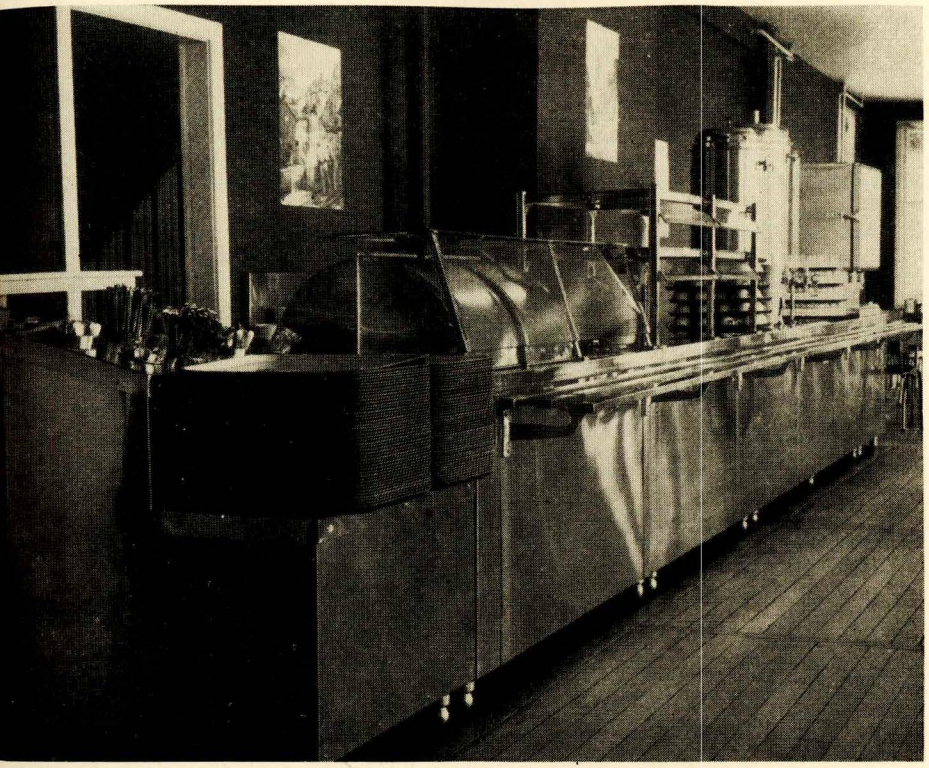
NATIONAL HEALTH GRANTS

The portion of the National Health Grant established "To assist in an extended program for the prevention and treatment of tuberculosis including rehabilitation and free treatment" is distributed by the Federal Government on the basis of $25,000 to each Province, with the balance divided 50% on the basis of population and 50% on the basis of the average number of deaths from tuberculosis in each Province over the previous five years. Under this Grant $238,326 was available to Manitoba for the fiscal year 1953-54. During the twelve months ended December 31st, 1953, expenditures under the Grant totalled $193,215, a reduction of $8,685 from the previous year. The following is a summary of the projects:

Streptomycin and Other Antibiotics	$27,165
Pneumothorax Treatments for Patients not able to Attend Free Clinics	3,175
Extension of the Rehabilitation Service	13,771
Chest X-rays on Admissions to General Hospitals	68,145
Assistance to the Sanatorium Board of Manitoba	15,284
Industrial X-ray Surveys	9,869
Assistance to St. Boniface Sanatorium	9,547
Extension of Travelling Clinic Service	2,636
Assistance to Manitoba Sanatorium	38,161
B.C.G. Vaccination	1,458
Assistance Towards Film on Tuberculosis Control	4,000

In addition to the above a grant of $15,000 was made under the Hospital Construction Grant towards alterations at Manitoba Sanatorium that provided for the conversion of five diet kitchens to two bed wards.

These Grants have been entirely expended to provide new and modern medical and surgical facilities, making available for treatment in full measure every up-to-date therapeutic method that can be utilized for the benefit of patients. These improved treatment facilities combined with development of a broad and extended program of case-finding have contributed immeasurably to the progress in tuberculosis control that can be reported today. Every effort has been made to utilize the



A popular improvement at Manitoba Sanatorium is this new cafeteria counter in the staff dining room.

Grants to most effectively supplement the established program, and we would like to record our gratitude to officials of both the Provincial Department of Health and Public Welfare and the Department of National Health and Welfare at Ottawa for their favourable consideration of all projects that have been put forward.

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. In accordance with Government policy no fire insurance is carried on the property at Brandon, Clearwater or Dynevor. Motor Vehicle Insurance under Fleet rating covers 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 by the Federal Government. The All-Risks policy carried on Mobile X-ray and related equipment, and the Public and Employer's Liability Insurance covering all operation of the Board with limits of $50-100,000 were renewed at substantially reduced premiums, due to the favorable experience. 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 and the Central Tuberculosis Clinic.

PERSONNEL

On December 31st, 1953, the Board had 527 employees, a decrease of three during the year. Staff turnover was substantially reduced from that experienced in recent years and this has contributed to the efficiency of operation. Registered Nurses, however, continue in short supply and to relieve the situation a number of nurses have been brought from Great Britain, and are stationed at Ninette and Clearwater Lake.

Membership in the Group Insurance Plan, established for the benefit of members of the staff and their dependents in 1950, increased by 41 during the year, an indication of greater permanence of staff. At the year end 381 members of the staff were insured for a total of $601,500 of Life Insurance, and $7,087 of weekly accident and sickness indemnity; 362 were covered for reimbursement of surgical expense up to a maximum of $200 for any one operation; and 119 members of the staff carried surgical coverage for their dependents. During the year 81 employees had claims for weekly indemnity benefits, and 83 for surgical benefits. There were no death claims. Payment of claims to employees or their surgeons totalled $13,065.

Through a Retirement Annuity Contract with the Department of Labour, Annuities Branch, a pension plan was established for permanent employees of the Board in 1946. As at July 31st, 1953, the anniversary of the contract, funds on deposit totalled $132,609, a net increase of $7,051 from the report of a year ago.

Balance of Payments by the Board on account of service prior to Aug. 1st, 1946	$22,712
Balance of Payments by the Board on account of service subsequent to Aug. 1st, 1946	46,519
Net Payments by Employees	63,378
	$132,609

During the twelve months ended July 31st, 1953, 18 employees retired or left the service of the Board and received paid-up personal annuity contracts or cash refunds with a present value of $19,742.

The responsible officers and employees in every institution and department have continued to display a noteworthy devotion to the improvement of the service and the advancement of the work. Each in his own sphere has contributed wholeheartedly of his skills and abilities, and the pooling of these many minds and talents in the common effort has brought about another year of marked achievement.

APPRECIATION

Once again, I should like to record my warmest appreciation for the direction and counsel of the Chairman of the Board and the Chairman and members of the several Committees. It is with pleasure that I acknowledge and express thanks for the cordial associations and confidence that are evident in all relationships with the Medical Director and the medical officers of the Board; with officials of the Provincial and Federal Governments; the officers or co-operating institutions; and with department heads and members of the 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 Brandon	City of Portage la Prairie	City of St. Boniface	City of Winnipeg	Other Organized Municipalities	Unorganized Territory	Total
Brandon Sanatorium	....	....	.....	.....	1,292	1,032	2,324
Central Tuberculosis Clinic	49	90	338	4,587	4,282	2,376	11,722
Clearwater Lake Sanatorium	....	....	.....	.....	663	5,598	6,261
King Edward Memorial Hospital	....	....	39	27,409	203	1,080	28,731
Manitoba Sanatorium	2,331	1,189	442	13,616	41,793	15,801	75,172
St. Boniface Sanatorium	193	303	3,417	16,935	34,428	22,383	77,659
	2,573	1,582	4,236	62,547	82,661	48,270	201,869

Government 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	Other	Total
Brandon Sanatorium	355	87,439	.....	.....	119	.....	.....	87,913
Central Tuberculosis Clinic	522	1,179	.....	251	.....	426	.....	2,378
Clearwater Lake Sanatorium	23	58,240	.....	.....	.....	731	.....	58,994
Dynevor Indian Hospital	....	18,161	.....	.....	.....	.....	.....	18,161
King Edward Memorial Hospital	4,737	.....	.....	237	.....	365	236	5,575
Manitoba Sanatorium	4,360	1,193	195	505	.....	5,864	.....	12,117
St. Boniface Sanatorium	3,155	15,722	45	.....	.....	4,032	.....	22,954
	13,152	181,934	240	993	119	11,418	236	208,092

Total Treatment Days — 1953

Province of Manitoba—Cities, Municipalities and Unorganized Territory	201,869
Government of Canada, Yukon Territory and Other Provinces	208,092
	409,961

L. ROSS

REPORT OF THE MEDICAL DIRECTOR

THE objective and the responsibility of the Sanatorium Board is to clear tuberculosis from Manitoba. This report will summarize all phases of the Board's program during 1953 to attain this end, and an even more important value to this occasion is a stock-taking to determine where we are today and how we must proceed in the future. The Board's tuberculosis control program has continued to be based mainly upon the discovery of new cases of tuberculosis as early as possible, the provision of prompt and effective treatment, and a sound and practical rehabilitation service. In Manitoba in 1953, 313,015 free chest X-rays were taken, 1,200 beds in seven sanatoria provided 409,961 days treatment, and educational, vocational and rehabilitation services were available for patients in all sanatoria.

TUBERCULOSIS DEATHS

Year	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	14.4	115	11.2	87	145.1	28
1953	11.0	90	8.6	68	114.5	22

(The figures for 1953 are tentative).

The continued decline in tuberculosis deaths is sensational. Especially gratifying is the drop during 1953 in the deaths among the non-Indian population. White and Indian deaths combined totalled 90 compared with 115 in 1952, and created the low rate of 11 per 100,000 of population. Referring to the foregoing table, you will note these 90 deaths compare with 432 in 1935, with 314 in 1945, and with 181 as recent as 1950—a 50 per cent reduction during the last three years. Considering the White population alone, although the decline has been gradual, the sharp drop from 95 deaths in 1952 to 68 in 1953 is striking and produced the remarkably low rate of 8.6 per 100,000. Indian deaths, which decreased rapidly the last few years, continued to drop, with only 22 for the year among a population of 19,500. This is a rate of 114 per 100,000, which is one-tenth that of 15 years ago. The precipitous drop in the death rate will be further commented upon when dealing with treatment.

Tuberculosis is becoming a disease of old people, 65% of the deaths occurring after the age of 40, 50% after 50, and a third after 60 years, with a preponderance of males. Most died of tuberculosis of the lungs and, as expected, 60% had far advanced disease when first diagnosed, compared to 25% in this classification for all sanatorium admissions. Only 9 of the 67 who died had a record of discharge from sanatorium, against medical advice. As to place of death, of the 68, 40 died in sanatorium, 17 in a general hospital, 6 in a mental hospital, and 5 at home. Most of the general hospital deaths were not diagnosed as tuberculous prior to post mortem examination.

NEW DIAGNOSES OF ACTIVE TUBERCULOSIS

Year	Whites Active T.B.	Indians Active T.B.	Eskimos Active T.B.
1940	438	147	—
1945	438	134	3
1946	514	180	7
1947	492	337	3
1948	496	535	4
1949	427	402	5
1950	364	239	9
1951	333	169	8
1952	368	182	2
1953	346	165	44

NEW CASES

It has been a matter of concern that, although a marked reduction of tuberculosis deaths has occurred, there has been little or no decrease in the number of new active cases diagnosed during the last three years. This, however, should not be interpreted as an increase in incidence but is the result of finding a greater number of existing cases. It is encouraging though that there was a decrease from 368 new cases in 1952 to 346 in 1953 among White people. Of those with pulmonary tuberculosis, disease was minimal in 42%, moderately advanced in 34% and far advanced in 24%, which has been about the same for the past few years, in spite of increased efforts to find disease earlier.

NEW ACTIVE CASES BY AGE GROUPS AND SEX, 1953

	Whites		Indians	
	Male	Female	Male	Female
0- 9	19	30	25	30
10-19	22	49	15	24
20-29	35	58	14	18
30-39	21	15	3	6
40-49	12	11	7	5
50-59	11	6	3	3
60-69	22	7	3	2
70 and over	14	8	4	—
Age not stated	2	4	—	3
Total	158	188	74	91

ADMISSIONS AND DISCHARGES

During the year, 1,232 patients were admitted to Sanatoria, compared to 1,191 in 1952, the increase being in White people and Eskimos. The increase in White people was due to temporary admissions for examination. Of the first admissions with pulmonary tuberculosis (excluding primary disease and pleurisy) 35% were minimal, 38% moderately advanced, and 27% far advanced. The percentage of advanced cases was slightly less in 1953 and there were only half as many admitted with non-pulmonary tuberculosis, compared to 1952. It is also significant that there were fewer re-admissions in 1953, especially in the far advanced class.

Of the tuberculosis patients discharged from sanatoria, 88% were classified as improved or better, and in detail as follows:

Inactive	17.0%
Arrested	39.0%
Active Improved	32.0%
Active Unimproved	6.4%
Died	5.6%

TREATMENT

Sanatorium Bed Occupancy and Capacity as at December 31, 1953

	Bed Occupancy		Bed Capacity	
Manitoba Sanatorium	229		285	
Central Tuberculosis Clinic	44		50	
Municipal Hospitals	82		125	
St. Boniface Sanatorium	272	627	287	747
Dynevor Indian Hospital	51		54	
Clearwater Lake Sanatorium	187		185	
Brandon Sanatorium	251	489	260	499
Total		1,116		1,246

There were 1,116 patients in sanatoria on December 31, 1953, compared to 1,106 in 1952, a reduction of 19 White patients and an increase of 29 Indians.

The average duration of treatment of tuberculous patients discharged from Manitoba Sanatorium and St. Boniface Sanatorium was 514 and 523 days, respectfully. An analysis of the Ninette discharges according to the type of treatment showed resection cases were treated 437 days on the average, thoracoplasties 940 days, pneumothorax patients 545 days, and for those on chemotherapy alone 467 days. I think with practically no collapse therapy now being instituted that treatment will be shortened.

TREATMENT DAYS—TUBERCULOSIS SANATORIA

Year	Province of Manitoba	Government of Canada and Other Provinces	Total
1949	233,143	188,304	421,447
1950	212,512	199,773	412,285
1951	210,784	205,481	416,265
1952	204,003	215,257	419,260
1953	201,869	208,092	409,961

The most remarkable development regarding tuberculosis during recent years has been in treatment. Streptomycin, which was the first drug to have a specific action against the tubercle bacillus, opened a new era. With the discovery of one drug others soon followed and excisional surgical techniques were made possible that could not be envisioned heretofore. All patients initially are treated with two or more of these antimicrobial drugs for several months. After maximum clearing, if a significant residual focus remains it is resected. Collapse therapy by pneumothorax has been abandoned although thoracoplasty operations are done for certain cases when resection is contraindicated. All resected specimens are examined pathologically and correlated with clinical, radiological and bacteriological studies. At present we are riding the crest of resection surgery and it may be that after more prolonged observation of long-term chemotherapy, less surgery will be considered necessary. The dramatic effects of drugs and surgery should not dim our appreciation of the established principles of the cure-rest, teaching, and sanatorium regime. Most new cases on drug treatment become sputum negative in a few months and sanatorium superintendents are finding it more difficult to keep patients in sanatorium long enough. Although an increasing number of discharged patients are receiving drugs as out-patients, this practise is discouraged and dependent upon sanatorium recommendations. However, we must keep in mind that out-patient chemotherapy has a place in treatment, as there are many advantages in restoring the home life of the patient and shortening the period and cost of hospitalization. With the accelerated decline in tuberculosis mortality and with more effective treatment one may well wonder why there has not been a greater reduction in patients on treatment. Actually, there are 100 vacant beds, mostly at Ninette and the King Edward Hospital, thus creating administrative problems that are receiving attention. However, new methods of treatment, if not curing in all cases, are keeping alive many who otherwise would have died. Also, augmented case-finding has kept up the number needing treatment.

Throughout Canada and the United States patients leaving Sanatoria against medical advice has become an increasing problem. The new drugs to some extent have aggravated the situation because of their prompt effect upon symptoms and the patient's well being. Also, by rendering sputum negative for tubercle bacilli early in treatment, legal hold from a public health point of view is weakened.

In Manitoba the problem is not alarming but in 1953, 99 or 8% of all sanatorium discharges, including Indians, were contrary to medical advice. A special study has been made of this group without much enlightenment. Sixty-four of the 99 simply refused treatment and 15 were discharged for disciplinary reasons. Fifty-seven had been in sanatorium before, half of them two or more times. Twenty-five per cent had positive sputums. Twenty-seven of the 99 returned to treatment, 3 moved out of the province and 15 continued chemotherapy at home, so actually about half of these cases created little, if any, public health problem. At least all known sources for spread of infection should be eliminated and the sanatoria should do their utmost to hold infective cases. No satisfactory provision has yet been made for refractory patients but it is hoped that within the coming year some detention beds will be provided at the Central Tuberculosis Clinic. Patients at home and receiving chemotherapy as out-patients create somewhat of a problem and, although this practice is discouraged, there were 152 cases in 1953, although, as previously stated, only 15 of these left sanatorium against advice. Drug treatment should seldom, if ever, be given initially except in sanatorium because the successful management of tuberculous cases requires much more than drug therapy. However, as previously mentioned, post-sanatorium chemotherapy has a place in treatment somewhat similar to the continuation of pneumothorax after discharge.

GOVERNMENT OF CANADA GRANT

The National Health Grants have made an outstanding contribution in the campaign against tuberculosis in Manitoba and throughout Canada. Since they came into effect in 1948 they have financed new projects and extended existing services, and concurrent medical advances during this period have greatly enhanced the opportunities for assistance.

REHABILITATION

The ultimate goal of successful treatment is the restoration of the patient to economic independence and to maximum usefulness to himself and the community. To attain this objective the Sanatorium Board provides for patients in all sanatoria a Rehabilitation service which consists basically of vocational counselling and academic, occupational and vocational training. There is little unemployment among ex-sanatorium patients. (See report on Page 40.)

THE CENTRAL TUBERCULOSIS REGISTRY

The Central Tuberculosis Registry provides a central, complete and readily available record of the vital facts about tuberculous patients, whether in or out of sanatorium, their follow-up, and information about their families and contacts from the beginning to the end of the patient's observation. A uniform record of admissions and discharges for all sanatorium patients and of all examined by various diagnostic clinics and agencies is received and analyzed. It is not possible now to discuss the Registry in detail but from the information contained in this report and the appended statistics, it is obvious that the study and interpretation of such has a vital bearing on the evaluation and direction of policy. I wish to thank on behalf of the Board, and personally also, the Director and staff of the Central Registry for willing, prompt and valuable service.

APPRECIATION

From this and foregoing reports the extensive operations and accomplishments of the Sanatorium Board have been reviewed and I fully appreciate that this was possible only by the co-operative, devoted and able service of many people directly and indirectly associated with this organization. I am grateful for the guidance and support of the Chairman of the Board, the Chairmen of the Board's various committees and all members. I am appreciative of the pleasant and co-operative assistance of the Executive Director, which makes possible the close and essential correlation of medical and non-medical matters. The assistance of the Assistant Medical Director is deeply valued and also the co-operation of the Medical Superintendents of all Sanatoria. I sincerely thank the Minister, Deputy Minister and Officers of the Provincial Health Department, the City of Winnipeg Health Department, Indian Health Services, and the Department of National Health for their contribution to the whole program. I also join the Chairman in paying special tribute to the Associated Canadian Travellers.

Respectfully submitted,
(Sgd.) E. L. ROSS, M.D.,
Medical Director.

Premier Campbell and members of Cabinet take the opportunity for their regular chest X-ray during the survey of the Civil Service staff. Here Premier Campbell is being X-rayed, and Cabinet ministers waiting their turn are (Left to Right) Hon. E. Prefontaine, Hon. W. C. Miller, Hon. F. C. Bell, Hon. C. E. Greenlay, Hon. Wm. Morton and Hon. Ivan Schultz.

Preventive Services Headquarters
Central Tuberculosis Clinic

Prevention

PREVENTIVE SERVICES

From the Report of the Medical Director

EACH of the 346 people who developed tuberculosis in Manitoba during 1953 received their infection from someone with the disease. Tuberculosis will not cease to be a major health problem as long as there is such a reservoir of infection, and as long as there are cases to be found case-finding should continue. Various diagnostic programs have been highly developed, such as chest clinics, community X-ray surveys, industrial and pre-employment X-ray examinations, and general hospital admission X-rays. Governmental and voluntary funds to finance these programs have assumed large proportions, and it is essential that they be used to the best advantage.

The distribution of new cases and deaths throughout the province are constantly under review, as well as the findings by the various dianostic programs. Private physicians diagnose 18% of the new cases, chest clinics, 58%, and general hospitals (including admission X-rays) 24%.

A study of sanatorium admissions revealed that, at the time of their examination that resulted in admission, 58% had symptoms. This emphasizes the important role of the private physician, who in these cases had an opportunity to initiate steps toward treatment. It is also significant that 42% were diagnosed before symptoms developed. Six per cent of the admissions were examined only because of contact with tuberculosis. The Sanatorium Board provides through clinics, surveys and hospitals throughout Manitoba X-ray diagnostic facilities without charge, and the medical profession needs to be kept aware of their responsibility and importance in the anti-tuberculosis campaign and of the diagnostic facilities available to them.

CASE-FINDING

The following table shows the magnitude of the Board's case-finding program. X-ray examinations for the year totalled 313,015, and that this is a sustained effort is evident and, in relationship to the province's population, I doubt if such a performance has been duplicated elsewhere. It is appreciated that the number of chest X-rays taken in itself cannot be considered a basis for evaluation. A high level of interpretation efficiency is essential; also an adequate record and follow-up of tuberculous cases found and provision for prompt treatment. Manitoba can qualify in these respects.

Examinations at Clinics, Hospitals, and Surveys—1944-1953

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
1953	10,137	4,703	83,259	214,916	313,015
	106,642	54,580	280,808	1,768,735	
Grand Total, 1944 to 1953					2,210,765

Surveys were held in 51 municipalities, 7 Local Government Districts, and the City of Winnipeg. Positive findings are decreasing and with only 49 active cases discovered by surveys, the incidence was one case in approximately 4,000 X-rayed. The value of this case-finding method in relation to its cost has been under critical review for the past two years, but so far it is thought that as long as there are new cases to discover we should continue our search for them. No doubt many of the 49 people found with active disease would otherwise have progressed and spread infection. However, the trend is to hold surveys less frequently in low incidence areas and more often where new cases are developing.

Compulsory chest X-rays has been a subject of discussion and, although it is desirable to X-ray all in a community during a survey, the Board is doubtful if this can be accomplished by compulsory measures. One needs to be certain that local interest and effort have been promoted to the limit before compelling people to be X-rayed, and enforcement no doubt would be a problem. The financing of the preventive program is based on voluntary support and more than likely this would be lacking if an element of compulsion was introduced through legislation. It must be kept in mind that the findings of an X-ray survey are as they happen to be on that date and a clear X-ray is no permanent guarantee of freedom from tuberculosis. I do believe with the X-ray coverage that Manitoba has had for a number of years and with cases found now being so few, that we should be thinking of limiting mass surveys rather than giving them undue emphasis. The hospital admission chest X-ray program has supplemented community surveys in a more continuous manner and in some parts of the province we have been holding X-ray clinics twice a year rather than every two or three years.

Travelling Clinics are distinct from the large mobile X-ray units. The latter have no doctor in attendance and their objective is to X-ray all people in a community. The travelling clinic with a doctor and X-ray technician provides a consultation service. People examined are mainly those suspected by their doctor of having tuberculosis or are known cases for review or tuberculosis contacts. During 1953, 95 clinics were held throughout the province, some on a monthly basis, and 4,703 examinations were made. Twenty-three persons, or one in 205, were found with active tuberculosis so this is a fruitful source for case-finding. The regions of Manitoba having the highest incidence of tuberculosis are not accessible by the heavy large mobile units, so for the past few years a more intensive travelling clinic service has been provided for these localities, which are mainly along the lakes and predominantly Metis in population.

Stationary Clinics are the out-patient clinics in each sanatorium and the Central Tuberculosis Clinic. The number of examinations by these services totalled 10,137 and about 6,000 of these were at the Central Clinic. These clinics diagnosed one-third of the new active cases reported so their important service is obvious.

Industrial Surveys have been carried out jointly by the Sanatorium Board and the Winnipeg Health Department for some years. The City organizes the work and the Board does it—that is, provides X-ray equipment, technicians and doctors to read and report on the films. This extension of case-finding is a National Health Grant project. During 1953, 2,421 office, business and industrial concerns were provided with this service, the X-ray equipment being set up at 92 sites. The fact that 94% of the employees had chest X-rays is an indication, not only of the thoroughness in planning but particularly of the interest and co-operation of the various business firms, for which we are duly grateful. There were 30,109 persons X-rayed and 16, or one in 1,881, found with significant tuberculosis, which is twice the incidence in general community surveys.

Besides the above, 14,667 free chest X-rays were taken at the City Hall, 4,590 of these are prerequisite to employment. Including the 27,760 persons X-rayed in the Survey of Ward II, routine free chest films in Winnipeg totalled 72,259 (not including hospital admissions). Please be referred to the appended full report of the Division of Tuberculosis Control of the Winnipeg Health Department.

Chest X-ray Program for General Hospital Admissions—General hospital admissions have a higher incidence of unsuspected tuberculosis than the population in general. In 1949 a program was initiated to routinely X-ray all such patients and now 56 hospitals are participating in Winnipeg and throughout the Province—in fact, all have X-ray equipment. The hospital is remunerated on a per film basis and, if there are over 1,000 annual admissions, X-ray equipment to take miniature films at low cost is installed. Little further expansion of this program is anticipated.

Number of Hospitals	56	
Number of in-patients x-rayed		71,120
Number of out-patients x-rayed		6,961
Number of staff x-rayed		5,375
Total		83,456

The 56 hospitals during 1953 admitted 105,559 patients (13.4% of Manitoba's popu-tion) and 71,120 were X-rayed. This is 67%, which is a slight improvement over the evious year. Some are low and some very high but, considering all factors, 67% is ot bad and compares favourably with similar programs in other provinces. Each spital submits a detailed report quarterly, which is carefully reviewed and those ith a low X-ray percentage are urged to do better.

It is understood that these X-rays are simply a method of screening out abnor-alities, which have to be assessed by further investigation.

1. Of the 71,120 admissions x-rayed 89, or one in approximately 800, had apparently active tuberculosis (compared to one in 4,000 x-rayed by community surveys).
2. 381, or one in 186, were considered to have apparently inactive tuberculosis.
3. 198, or one in 356, had probable tuberculosis of doubtful activity.
4. 356, or one in 199, were considered tuberculosis suspects.
5. Taking into account all the above, one in 69 had evidence of present, past or suspected tuberculosis.
6. There is a growing trend to extend the scope of Tuberculosis Associations to include an interest in chest diseases other than tuberculosis. The admission hospital x-ray program affords an opportunity for this, which is evident by the fact that 2,648, or one in 26 x-rayed, had some non-tuberculous pulmonary abnormality. Also 3,352, or one in 21, had a probable cardiac abnormality. These non-tuberculous conditions are reported to the patient's physician.
7. Of the 6,961 out-patients x-rayed, 11 had probable active tuberculosis. This project enables people to be referred to hospitals throughout the province for a chest x-ray without charge, which greatly supplements the Board's Travelling Clinics and Community X-ray Surveys.
8. All hospitals are encouraged to routinely x-ray nurses and other ward staff every 6 months. Such examinations totalled 5,375 and 7 were found with probably active tuberculosis.

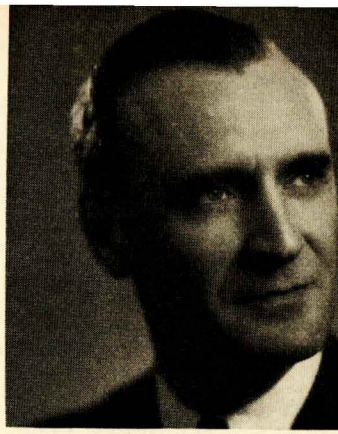
It is evident that the above program plays a major role in case finding, not only f tuberculosis but of other conditions incidentally revealed. It also creates an oppor-unity for closer relationship with doctors and hospitals throughout Manitoba. The oard is deeply appreciative of their interest and co-operation without which this pro-ect could not make such a worthy anti-tuberculosis contribution.

Vaccination with B.C.G. utilizes living bovine tubercle bacilli which have been so ccentuated in their virulence that they are not pathogenic but will still produce ufficient bodily response against subsequent infection with human tubercle bacilli to reate some degree of protection. Our great effort in Manitoba is to prevent infection nd only 2 to 5 per cent of school children up to the age of 16 have been infected as hown by tuberculin testing. Up to the present we have limited our B.C.G. vaccina-ion program to persons who, because of their occupation or environment, may be un-voidably exposed to tuberculosis infection. This group is confined mainly to nurses nd medical students, as you will note in the following table. We have been trying to xtend vaccination to tuberculosis contacts in families, and I am disappointed that nore progress has not been made. However, our effort along this line will be more oncerted in 1954. Among Indians the infection opportunity and rate is much high-r, so for some years a much more aggressive vaccination program has been in effect, pproximately 6,000 (mostly children) having been vaccinated by Indian Health Ser-ices since 1948.

During 1953 vaccinations of non-Indians totalled 660 in the categories shown in he following table.

Contacts	171
Student Nurses (General Hospitals)	271
Student Nurses (Mental Hospitals)	27
Student Nurses (Practical)	64
Nurses' Assistants	24
Nursing Staff (Other)	7
Medical Students	39
Sanatorium Staff	29
Others	28
	660

Report of the Medical Superintendent Central Tuberculosis Clinic and Preventive Services



DR. D. L. SCOTT

CENTRAL TUBERCULOSIS CLINIC

THERE was a total of 9,515 visits to the Central Clinic during 1953, an increase of 1,269 over 1952, and an increase of 3 in the daily average attendance. Pneumothorax treatments to out-patients accounted for 1,312 and total examinations were 8,203 (new—2,021 and re-examinations—6,182). A further breakdown in the 6,182 examinations show 2,342 visits for fluoroscopic examinations, dressings and special treatments. In "Special Treatments" are included 2,180 streptomycin treatments given to 79 out-patients.

There were 179 new cases of tuberculosis discovered last year. The highest incidence is still between 25-40 years of age, but 17 were over 60 years. After full investigation only 148 were considered to be active and in need of treatment; over half, or 96, were cases of pulmonary tuberculosis. It is interesting to note that early or minimal tuberculosis exceeded the far advanced cases for the first time.

Admissions totalled 460, an increase of 45 over 1952. In spite of this, treatment days were down by 1,425, indicating a more rapid turnover than in 1952. These 460 admissions comprise a miscellaneous group of cases of tuberculosis and diagnostic problems. There were 349 cases of pulmonary tuberculosis, old and new, 151 of these bacillary or infectious at the time, and 43 were cases of other forms of tuberculosis. The balance of 68 were miscellaneous diagnostic problems.

Discharges totalled 445 during the year. Over 50% of these were transferred to other tuberculosis institutions; almost 4% were discharged against advice; 12 died, 4 of these being due to non-tuberculosis causes, but all suspected on admission of having tuberculosis. There were 64 complicating conditions. The average duration of treatment was 31 days as compared to 36 last year.

Streptomycin and PAS or INH were administered to 222 patients, 79 of these being out-patients, and 3,363 grams of streptomycin were used. One trend that we are trying to discourage is the tendency of some patients to insist on going home and reporting as out-patients for their antibiotic treatment. We only acquiesce when circumstances make it unavoidable.

Pneumothorax and pneumoperitoneum refills are becoming fewer from year to year. These forms of treatment were administered to only 90 patients in 1953 as compared to 129 in 1952. Our small operating room, however, continued to be an important part of our treatment and diagnostic work.

The laboratory report reveals a total of 11,147 tests done. This work was done accurately and with despatch. One important trend is a slow but continued increase in the vaccination program. This procedure becomes more important as more of our population are reaching adult years without having the opportunity or misfortune to come in contact with tuberculosis.

The X-ray Department continued to have a high standard of technical ability. There were 5,222 X-ray examinations made, 5,097 of these being chest films of various kinds.

A few of the extra activities carried on from the Central Clinic are lectures to nurses in three Winnipeg hospitals. Classes to medical students are given weekly. In maintaining cordial relationship with all the hospitals in Greater Winnipeg we offer our consultation services freely.

PREVENTIVE SERVICES

Travelling Clinics—Ninety-five clinics were held in 44 centres in Manitoba last year. There was a total of 4,703 examinations done and 23 active cases of tuberculosis reported.

The mass survey effort continued throughout the year and there were 214,922 X-ray films made, comprising both large and 70 mm. films. Of this total number there were 423 new diagnoses made, of which 127 were active and in need of treatment.

Hospital admission films were received here from 40 hospitals and they totalled 0,379 films. These are promptly interpreted and returned to the hospitals in order o prevent any delay in having sick people looked after. There were 31 reported as robably active tuberculosis.

APPRECIATION

Once again, allow me to thank all those who took part in this program. I am ppreciative of the interest and assistance from the Members of the Sanatorium oard, especially the Executive Members. To Dr. Ross and Mr. Cunnings I wish to xpress my thanks for their ready help and advice. I am grateful for the valuable ssistance and support of the staff of the Central Tuberculosis Clinic and the Preven- ve Services, and for the efficient manner in which they have carried on their work. he cordial relations with our sister institutions and the many general hospitals in innipeg and Rural Manitoba that we so frequently deal with is fully appreciated.

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

City of Winnipeg

TUBERCULOSIS CONTROL DIVISION

URING 1953 there were 16 deaths in Winnipeg due to pulmonary tuberculosis. This corresponds to a tuberculosis death rate of 6.3 per 100,000 population and the lowest death rate ever recorded in Winnipeg. The following table illustrates he progress which has been made.

Year	No. of Deaths	Rate per 100,000 population
1920	138	71.7
1930	106	51
1940	52	23
1950	21	8.8
1953	16	6.3

HOSPITALIZATION

There was a monthly average of 199 Winnipeg patients hospitalized in the vari- us Sanatoria during the year 1953. This is a substantial reduction in the monthly verage of patients hospitalized during 1951 (238 patients) and 1952 (214 patients). he monthly average number of patients in the various sanatoria were:

King Edward Memorial Hospital	79
Ninette	55
St. Boniface Sanatorium	54
Central Tuberculosis Clinic	12

X-RAY SURVEYS

During 1953 the chest X-ray survey programme continued to expand. The mobile 0 mm. X-ray machine previously purchased by the Sanatorium Board and loaned ith staff to the City Health Department, the stationary 4 x 5 X-ray Unit at the City all and two other 70 mm. Machines (provided by the Board for use during the sur- ey of Ward Two residents) were all utilized in X-raying a total of 72,259 individuals. his is the second largest number of citizens to be X-rayed during any single year.

WARD TWO SURVEY

In conjunction with the Sanatorium Board, and financed by the Board, an X-ray urvey of Ward Two residents was undertaken during February and March. This urvey did not prove entirely successful as less than 50% of the residents availed hemselves of the opportunity to have a chest X-ray. Only three new active cases ere discovered in this group of citizens which suggests that such surveys are not a aluable source for discovering new active unsuspected tuberculosis. Indeed, we ave never X-rayed such a large group (27,760) and found so little tuberculosis.

INDUSTRIAL SURVEYS

Office, business and industrial concerns numbering 2,421 were provided with an opportunity for their employees to have a chest X-ray at one or other of the 92 sites where the X-ray machines were set up. Ninety-four per cent of the employees of these business concerns attended for an X-ray.

Table I lists the activities of the X-ray Units.

70 mm. Units

No. of operational sites	92		
No. of industries X-rayed	2,421		
Average attendance	94%		
No. Industrial X-rays taken		30,109	
Ward II Survey		27,483	
Total 70 mm. X-rays			57,592

4 x 5 Unit at City Hall

No. of survey, contact, and patients X-rayed	10,077	
No. of pre-employment X-rays	4,590	
Total 4 x 5 X-rays		14,667
Total X-rays taken during 1953		72,259

Twenty-six new active cases of pulmonary tuberculosis were discovered during the year which is 35.1 of the total number of new active pulmonary cases discovered by all agencies such as private physicians, sanatoria, hospitals, private and public clinics.

Active Cases of Pulmonary Tuberculosis Discovered Annually

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
1953	74	26	35.1

There was a ratio of one new case discovered for every 2,779 individuals X-rayed. The value of the pre-employment chest X-ray programme in preventing the spread of tuberculosis is well illustrated by the finding of three new unsuspected cases among 4,590 pre-employment X-rays or one new case for every 1,500 individuals X-rayed.

Year	No. X-rays	Total Active Cases	Active Cases 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 2,088 X-rays
1953	72,259	26	.4 or 1 every 2,779 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 Through Health Department

Surveys	19
Pre-employment	3
Referred by private physician	2
Individuals	2
Total	26

It should be noted that there were 739 individuals referred to the City Hall by private physicians for chest X-rays and that 2 new active cases were discovered among this group or a ratio of one case in every 39 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 lung pathology.

Tuberculosis discovered on Surveys continues to be found among those individuals who are in the most productive years of their lives. Sixteen cases or 62% of the new 26 cases were discovered in the 20 to 39 years age group. However, one of the major advantages of X-ray surveys is demonstrated in the table below which shows that in 54% of the discovered cases the disease was minimal in extent and hence susceptible to early treatment and a more rapid cure.

Active Cases Discovered Through X-rays Taken on Surveys and at City Hall by Age Group

	0-19 yrs.		20-39 yrs.		40-59 yrs.		60-yrs.		Total
Year	No.	%	No.	%	No.	%	No.	%	Cases
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
1953	3	12	16	62	5	20	2	8	26

Extent of Disease in Active Cases Discovered through Survey

Extent	No. of Cases	Percentage
Minimal	14	54
Moderately Advanced	8	31
Far Advanced	4	15
	26	100%

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

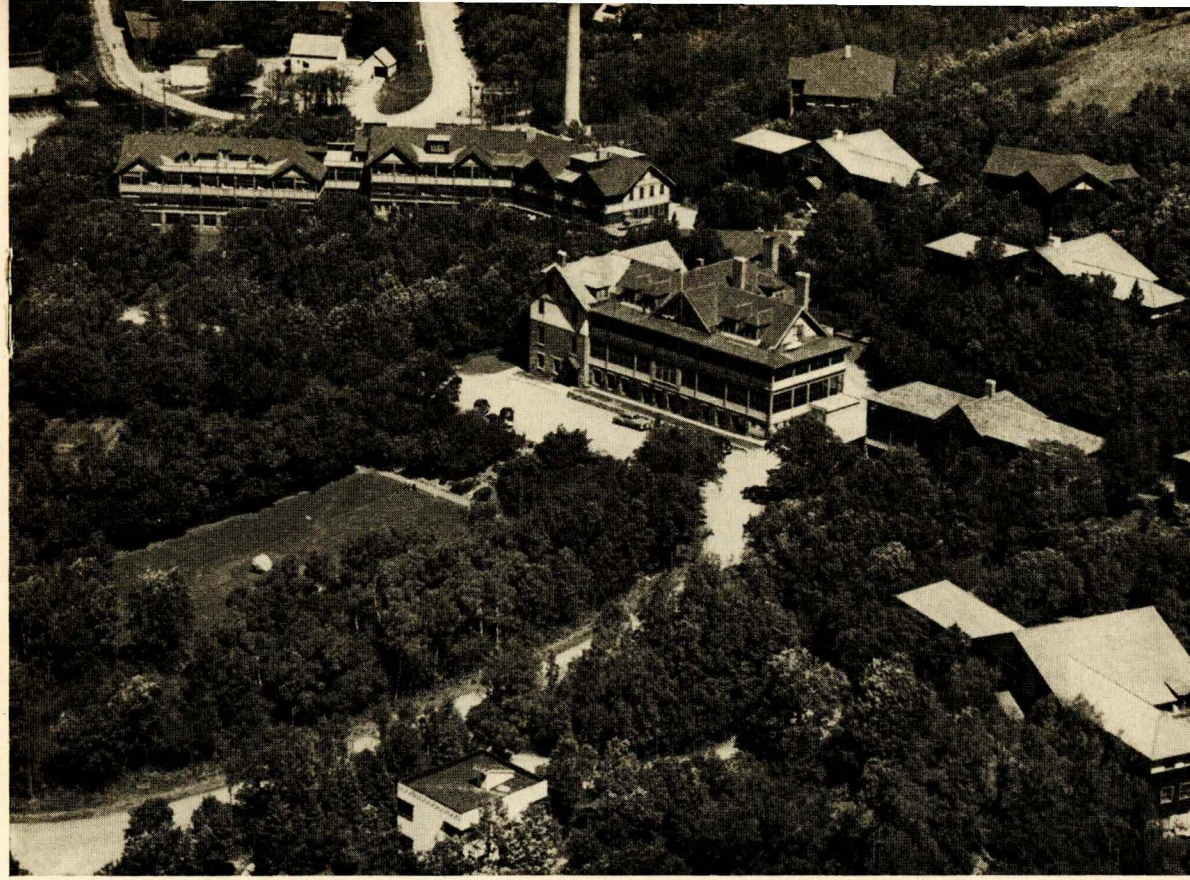
Respectfully submitted,
(Sgr.) R. G. CADHAM, M.D., D.P.H.,
Deputy Medical Health Officer.

ASSOCIATED CANADIAN TRAVELLERS

DURING 1953, 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 hte 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 $20,850. Added to the amounts previously given, this makes a total of $212,424 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.



Manitoba Sanatorium

. PAINE

Treatment

MANITOBA SANATORIUM

THE year 1953 was the 44th of operation of Manitoba Sanatorium. It was a most productive year with more construction and improvement in equipment than in any year in the past thirty-five. Though patient population decreased somewhat, treatment continued on an active plane with a greater use of pulmonary resection than in any previous year.

PATIENTS

Treatment days numbered 87,289 as compared to 92,353 in 1952, and an average of 92,500 for the previous five years. This year the increase in patients with Indian blood continued, 57 being admitted as compared to 41 in 1952, but there were fewer treaty Indian admissions and more Metis.

ADMISSIONS AND DISCHARGES

Admissions during the year totalled 321 of which 194 were for treatment and 127 for review or diagnosis. Average age on admission was 31 years. As regards sex 90 were males and 104 females. Of those admitted for treatment 36% had new disease, 24% had suffered relapse and 40% were continuing treatment after periods in other institutions or at home. In those with new pulmonary tuberculosis 50% had minimal disease. Eleven new cases had non-pulmonary tuberculosis of which 7 had pleurisy, 3 pelvic disease, 1 glandular and 1 erythema nodosum.

Total discharges were 337 of which 214 were from treatment and 123 had been in for short periods of diagnosis or review. Of the 214 treatment cases, 87% went home with medical advice, 5% against medical advice and 8% were transferred to other institutions. Status on discharge of those with pulmonary tuberculosis was as follows: Inactive 13.1%, arrested 57.5%, active improved 20.7%, active unimproved 2%, dead 6.7%. Deaths in Sanatorium for the year were 13, of which 8 came to autopsy. Average duration of treatment was 1 year and 2 months. Seven patients went home with positive sputum of which 3 came back in Sanatorium.

OUT-PATIENTS

A total of 1,353 out-patients were examined, including 345 old patients back for review. All old patients and diagnostic problems were seen in conference following an interim history, X-ray, sedimentation rate and sputum examination or other tests when indicated.

TREATMENT

Antibiotics, particularly streptomycin, combined with PAS, continue to play an important role, not only in improved prognosis but also in influencing the management of treatment. All admissions were placed on rest and antibiotic therapy for prolonged periods, usually 12 to 18 months. After maximal clearing on this routine, significant residual disease, if any, was treated surgically. At present we definitely favour resection to surgical collapse in all cases where it can be done safely and with lung saving in functional lung tissue which is usually the case. This year resection surgery has greatly exceeded collapse surgery, partly because of our changing views and also intratracheal anaesthesia is now being given by one of our resident medical staff thus removing considerable restriction in choice of procedure which was previously imposed on our work. Advantages of resection over surgical collapse are believed to be a higher incidence of sputum conversion and much less tendency to relapse. In addition to more advanced cases we have also applied local resection to certain number of unstable minimal lesions.

Collapse by air has been largely abandoned with no pneumothorax induced during the year and only 9 inductions of pneumoperitoneum. In all 93 major chest operations were performed. Thoracoplasty was done in 12 patients with a total of 16 stages; in addition 6 patients had extraperiosteal wax packs. There were 62 pulmonary resections, 2 patients having bilateral operations. Extent of resection was as follows: Pneumonectomy 2; lobectomy 8; multiple resection (one lobe plus other areas) 12; segemental resection 8; lesionectomy 2; wedge resection 30. Other major procedures were decortication 1; cavernostomy 1; cavernostomy closure 1; sinus excision 2; Schede operation 1; removal gauze pack 1; muscle repair 1; scapulectomy 1. There were 3 operative deaths, all in pulmonary resections on bad risk cases who had no hope of recovery without operation. Minor surgical procedures include phrenic operations 4; gland excision 1; tonsillectomy 1; aspiration 252; bronchoscopy 92. A complete list of operative procedures is appended. Three hundred and one bottles of whole blood were given to 99 patients.

Streptomycin 1 gram, twice weekly with PAS 12 grams daily, has been routine treatment for all admissions. Altogether 342 patients have received streptomycin during the year. Isonicotinic acid Hydrazide has been used less frequently, mainly where streptomycin was not effective or not tolerated: It has usually been combined with PAS, less frequently with streptomycin and occasionally all 3 drugs have been used together; 148 patients received the drug during the year.

X-RAY DEPARTMENT

A high standard of work continues in this department under the direction of Mr. William Amos, R.T. This year 4,646 radiographs were made, including 2,953 in-patients, 1,031 out-patients and 662 staff. Volume of work exceeded last year by 168, the increase being due to resection surgery. An electrocardiograph machine was purchased in February and during the year the department did 90 electrocardigrams, mostly as preoperative investigation.

LABORATORY

This department, under Mr. J. M. Scott, R.T., continues to maintain a high standard both in work and in teaching. With expanding service in culture work, blood grouping and handling of pathological specimens from lung resection, more working space is urgently needed. Laboratory examinations for the year numbered 10,878 with details as follows: blood, 4,378; urine, 3,069; sputum, 1,586; gastric contents, 719; Mantoux tuberculin tests, 319; lung capacity tests, 201; puncture fluids, 157; resected lung tissue for tubercle bacilli, 132; antibiotic sensitivity tests, 103; B.C.G. immunization, 50; basal metabolism tests, 37; unclassified, 127.

A new respirator for more accurate measurement of lung capacity has been giving excellent results. The perfusion of resected lung specimens with fixing fluids in preparations for color photography and microscopic examination has added greatly to the work.

REHABILITATION

A full report has been submitted elsewhere but mention should be made here of the excellent work of this department under the able guidance of Miss Margaret Busch. It becomes yearly more necessary to give academic schooling to the increasing number of patients who have little or no elementary education. In addition many patients take full advantage of vocational training courses. Occupational therapy gives interest and variety to Sanatorium routine and the home making course is of real benefit to many patients who are housewives.

STAFF

Medical staff has remained stable throughout the year. Doctors are to be commended for excellent support on the wards, including nightly rounds of all buildings in the interests of discipline and unusually heavy duty in the operating room. Dr. Zajcew deserves credit for his skilful administration of intratracheal anaesthesia for lung resection. Miss Isabelle Duncan became Superintendent of Nurses in May and is managing her new duties well. Graduate nurses have been in better supply for most of the year, due mainly to additions from Great Britain. Staff conditions in general have been better throughout with chronic shortages so prevalent in recent years largely removed.

EDUCATION

The affiliate course in tuberculosis nursing, under the able direction of Miss Edwina Buchan as full-time Instructress, was continued. Altogether 54 students from the Brandon General and Brandon Mental Hospitals each received a 2 months' course, including 38 hours of lectures and ward rotation. Lectures were given by

the Instructress, the Medical Staff and members of Laboratory, Dietetic, Rehabilitation and Public Health Departments. Miss Buchan also gave lectures to nurse's assistants and a series of talks to patients taken in small groups.

BUILDINGS

As mentioned before, 1953 was an outstanding year in construction and improvement in physical equipment. Not since the early building years of the Sanatorium has so much been accomplished in one year. The major construction was the new addition to the Nurses' Home which is well under way. A new boiler was installed in the power house; the laundry was greatly enlarged and equipped with much new machinery; kitchen service was centralized, with new cooking equipment in the infirmaries. A cafeteria was installed in the main dining room. Further new wards were built in the West infirmary and linoleum laid on east infirmary halls. New air conditioning was installed in the operating room. While the bulk of this work was done on contract, our maintenance staff gave assistance in all projects, which made for an unusually busy year. Great credit is especially due to Mr. J. R. Scott, Chief Engineer, for his capable aid and direction.

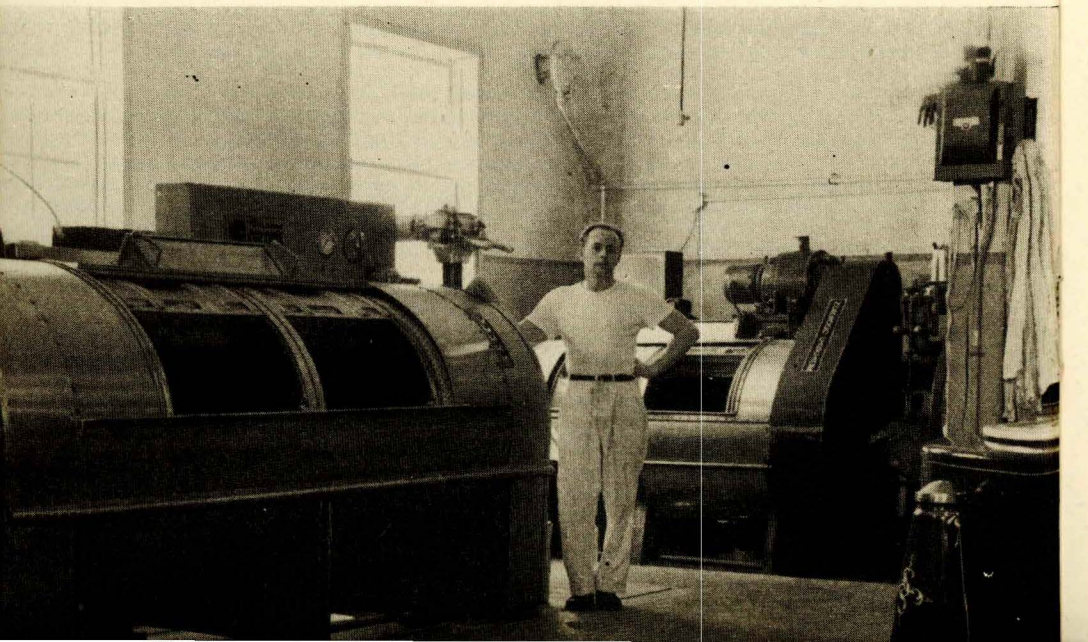
APPRECIATION

Many staff members not already mentioned have given loyal and valuable support; to all these I give thanks for their good work. I wish to thank the Chairman, the Chairmen of the Administrative and Finance Committees, the Executive Director and all members of the Sanatorium Board for their sincere interest and continuous efforts on our behalf. Appreciation is expressed to the Medical Director of the Sanatorium Board, the Superintendents of the various tuberculosis institutions and the Department of Health for much assistance and cordial relations throughout the year.

Respectfully submitted,

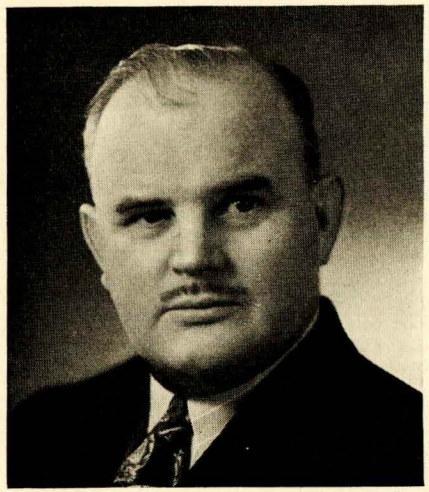
A. L. PAINE,
Medical Superintendent.

A corner of the enlarged laundry at Manitoba Sanatorium showing some of the new machinery. The laundry processed 581,140 pieces in 1953.



HON. PAUL MARTIN
Minister of National Health and Welfare

—Photo by Karsh



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

—National Film Board Photo

Statement
by the

HON. PAUL MARTIN
Minister of National Health and Welfare

for publication in the

1953 Annual Report of the

SANATORIUM BOARD OF MANITOBA

I WELCOME this opportunity of acknowledging the splendid progress made during the past year in this province's efforts to bring tuberculosis under control. With a well-balanced program including vigorous preventive measures, early diagnosis, prompt and effective treatment and a positive approach to rehabilitation, the Sanatorium Board of Manitoba has given outstanding direction to this vital work. As a result, the hope of Manitoba's tuberculosis sufferers is brighter than ever before.

A measure of the Board's effectiveness is seen in the province's tuberculosis death rate for 1952 of 14.4* per 100,000 which is well below the national average of 17.1.

As Minister of National Health and Welfare, I am particularly gratified by the truly remarkable results that have been achieved among the province's native population. Ten years ago, the tuberculosis death rate among Indians in Manitoba was the highest in any Canadian province. By 1952 it had become one of the lowest. For every nine deaths from tuberculosis occurring among Indians in Manitoba ten years ago, at the present time there is only one. This is surely an outstanding accomplishment and a great tribute to the Board's work.

In the six years since the inauguration of the National Health Program, very substantial federal grants have been made available to help support the work of tuberculosis control in this province as in every part of Canada. While this financial assistance is of unquestioned value, it is no substitute for the devoted personal service of those who have a share in making the Board's program such an unqualified success. I am sure that the very encouraging progress of recent years will not be a cause for complacency but an inspiration to renewed efforts to the end that tuberculosis as a major cause of suffering and death may be eventually eliminated.

*Manitoba's tuberculosis death rate has been further reduced to 11.0 per 100,000 in 1953.

Care of Indian Patients

From the Report of the Medical Director

THE reduction in tuberculosis among the Indians has been remarkable during the past four years, which is accounted for by applying the basic principles of tuberculosis control—case-finding, treatment, and isolation. In 1948 there were 535 new active cases of tuberculosis diagnosed among Indians and 139 deaths. In 1953 there were 165 new cases and 22 deaths. For the past six years chest X-ray surveys have been brought to the Indians on their reserves, about two-thirds of the population being X-rayed yearly. This work is organized by the Regional Superintendent, Indian Health Services, and carried out by the Sanatorium Board. In 1953, 12,573 were X-rayed. This year for the first time X-ray surveys were extended to Eskimos in the sub-Arctic region, 378 being X-rayed at Chesterfield Inlet, Eskimo Point, Baker Lake and Repulse Bay. There was a high incidence of tuberculosis found. Brandon Sanatorium, Clearwater Lake Sanatorium and Dynevor Indian Hospital provide 500 beds, these institutions being operated by the Sanatorium Board for the Department of National Health.

REPORT of the REGIONAL SUPERINTENDENT, INDIAN HEALTH SERVICES

IF deaths can be used as a gauge to indicate progress in control of tuberculosis in our Indian population we can feel some slight satisfaction. From a rate of 1,421 per 100,000 in 1943 the rate has dropped to 114 by 1953. We don't think this is entirely due to the natural decrease in the tuberculosis rate that has been noted in the past few decades.

Indians live much the same way as they did fifty years ago and it is questionable if their standard of living has been raised appreciably.

A better gauge for improvement is the number of new active cases. In 1948 we found 535 new active cases, in 1953 we found 165. In 1953 were were able to X-ray twice as many Indians as in 1948, or over 12,000 compared with 6,000. We are also finding fewer far advanced cases.

Our sanatoria for Indians and Eskimos ran at near capacity throughout the year. Some institutions at times exceeded their stated bed capacity and we continued to use beds in Ninette and St. Boniface Sanatorium. Total treatment days amounted 181,934, only 20,000 less than those for the white population. We do not foresee a sudden drop in demand for beds for Indians. They are subject to the economic state of furs and fish and this winter seems to be one of scarcity with many on relief rations.

X-ray surveys continued in our effort to X-ray all Indians yearly. Our sincere thanks are due for the transportation and technicians supplied by the Sanatorium Board and for the interpretation of films by their medical staff. In 1953 we X-rayed 12,433 Indians in Manitoba which is about 65% of an estimated population of 19,000. We propose to continue X-ray surveys yearly.

During the period 1930-1935 the late Dr. D. A. Stewart reported that 1,558 Indians had been X-rayed. In schools alone of 872 examined 38 were found with active disease and two suspects.

In 1953 we X-rayed 1,000 Indian children in schools. We found no active cases and only four suspects.

B.C.G. work was continued in 1953. We gave it to 644 natives, the majority of whom were new born babies. To date we have given B.C.G. to 5,453 since 1948. This includes an indeterminate number of Indians in N.W. Ontario.

Eskimos—All Eskimos except for a few at Churchill are outside the Province of Manitoba, although the fraternal arms of the Sanatorium Board do not enfold Manitoba alone. In the past few years you helped us out in N.W. Ontario, known with some justification as the forgotten part of Ontario. Last year two of your technicians went with us into the Central Arctic where we X-rayed 380 natives and found 28 new cases of tuberculosis. We hope to extend these surveys as three-quarters of the Eskimos north of Manitoba have never had an X-ray.

At present we have 50 under treatment. There were 28 admissions, 6 discharges and 2 deaths in 1953 and 20 admitted in January, 1954.

During the past year we set up a Central Registry for tuberculosis in N.W. Ontario located at Sioux Lookout Indian Hospital. As this hospital has about 75 beds for tuberculosis and is the centre from which T.B. surveys are made in that area it was thought to be more convenient to locate the registry there. It is modelled along the lines of the Central Tuberculosis Registry of Manitoba.

May I, on behalf of the Department of National Health and Welfare, express our most sincere thanks for the splendid co-operation and assistance you have given us in our anti-tuberculosis work. We are accustomed to take this for granted until we feel that we are one organization. This is an ideal situation and I mention it because it is so much superior to our relationship with other government and voluntary tuberculosis organizations. I should like to include in our thanks all the executive personnel, Miss Wilson, Miss Chapman, Mr. Anderson and the superintendents of the sanatoria.

Respectfully submitted,
W. J. WOOD, M.D.
Regional Superintendent,
Indian Health Services.

Brandon Sanatorium

W. READ

DYNEVOR INDIAN HOSPITAL

DYNEVOR Indian Hospital has completed its fifteenth year of operation by the Sanatorium Board. The following is a report for the year 1953, which was one of the busiest since the institution opened.

Dynevor is a 50-bed hospital but the converting of a diet kitchen into a ward added four more beds, and the patient population has been as high as 58. During the year 84 patients were admitted and 75 discharged and the total number of patient days' treatment was 18,036, an increase of 1,094 days over 1952. Appended are statistics concerning mainly the classification of disease on admission and discharge.

TREATMENT

About one-third of the patients are children and many of the remainder are aximum benefit treatment cases that have been transferred from Brandon Sana- rium. Treatment necessarily is of a conservative nature and, as elsewhere, there as been an increasing use of streptomycin, PAS and INH, which has proven of reat value. Of the new treatment cases, many, after preparatory rest and chemo- herapy, are transferred to other sanatoria, mainly Brandon, for surgery, and I wish o thank these institutions for their ready cooperation. We are observing that patients re admitted in the earlier stages of tuberculosis. Indian X-ray Surveys are mainly esponsible for this which, along with the newer drugs, makes cure much more cer- ain. Ordinary Sanatorium regime, however, is still the backbone of treatment. Good ood also plays an important part and I would like to pay tribute to the care given by he staff to provide excellent and attractive meals.

During the summer all hospital buildings were re-roofed and all buildings except he residence received a well deserved coat of paint. Continual upkeep of interior ainting and decorating has made the institution more attractive than any time in my nowledge. The grounds and gardens have been exceptionally well kept.

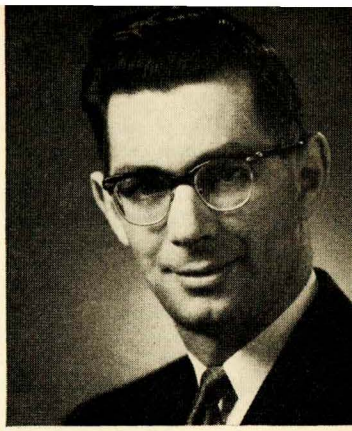
The staff, and the patients particularly, are especially grateful for the provision f a movie projector and screen, and during the year there were 44 separate shows, ll films being entertaining and many of them educational. They are no doubt of alue in keeping patients more contented on the 'cure'. I would also like to thank he Salvation Army for a delightful band concert. Of particular interest at Dynevor s Christmas and in all there were five Santa Claus parties, two magician parties, and choir. Gifts and candy were received from far and wide, sufficient to distribute per- odically throughout the year. A personal touch that I felt improved relationships vith patients and relatives was the sending of a Christmas card and personal letter o every patient who was discharged during the year.

APPRECIATION

There was little change in staff throughout the year and with a registered nurse n charge of each shift we are in a better position than we have been for years to ive first-class care to all patients. All staff deserve special mention, which is not ossible, but I particularly would like to thank Miss Stefanson, Superintendent of Nurses, for her efficiency, devotion and kindly acts during 1953. Mrs. Paradoski, as Secretary, has a thorough understanding of the operation of the institution and rovided indispensable service. Miss Parker, a senior licensed practical nurse, has een 19 years at Dynevor and I would like to especially commend her for her excel- ent service. All nurses' aids cooperated well and, indeed, right through the commis- ariat and housekeeping and caretaking staffs there was harmony and efficiency, nd I extend my sincere thanks for a year's work well and cheerfully done.

In conclusion, I would like to express my sincere thanks to the Chairman and Members of the Sanatorium Board and the Dynevor Committee for their usual kindly elp and cooperation during 1953. I would also like to thank Dr. Ross, Dr. Scott, and Mr. Cunnings for their constant advice, help and support. Thanks are also due to he accounting, x-ray and laboratory departments and also the Central Registry office t the Central Tuberculosis Clinic. To the Medical Superintendent and his staff, and ndian Agents and Agency Doctors for the various Reserves I extend my thanks for heir help and advice throughout the year.

Respectfully submitted,
(Sgd.) W. W. Read, M.D.,
Medical Superintendent.



DR. A. H. POVAH

BRANDON SANATORIUM

THE seventh year of operation of Brandon Sanatorium, a 260-bed institution, saw 90,237 patient days devoted to the treatment of tuberculous Treaty Indians and Eskimos. It gives me great pleasure to present this Annual Report with attached statistical tables for your consideration.

ADMISSIONS AND DISCHARGES

During 1953, there were 173 admissions to hospital. It was noticed that though there were as many admissions as the previous year, there were more discharges than the previous year by 22, with the result that for the first time beds have been empty. Of the 173 admissions, 37 or 12.14% were new cases of tuberculosis, 19 or 9.83% were re-admissions, and 79 or 45.66% were transfers from other institutions. Seventeen or 10.98% were admitted for review or diagnosis, and 21 or 21.39% were admitted for special treatment of such conditions as bronchiectasis, hydatid cysts, pneumonias, etc.

It is noteworthy that of the 19 re-admissions, 5 were patients who had previously gone A.W.O.L. and were returned to hospital, and 2 had no active disease, so that only 12 or 8.88% of the active cases of tuberculosis admitted were for reactivation of disease. Also worthy of note are the 79 or 58.52% of admissions of active cases of tuberculosis which were transfers from other institutions for further treatment and for surgical intervention.

Of the admissions for treatment of pulmonary tuberculosis, 52.84% had either moderately or far advanced disease as compared with 66.65% in 1952, meaning that patients are being admitted with less extensive disease than previous years and therefore with disease that is more amenable to treatment.

Only 3 patients were admitted with meningeal tuberculous involvement. Of these, in one, there was such a delay between the onset of the disease and the admission to hospital that treatment was of no avail and he died a few days after admission. The other 2 are still on treatment and it is expected they will recover. Most important in the successful treatment of these cases is early diagnosis and early commencement of chemotherapy.

Discharges numbered 178 in 1953. Of these, 126 or 70.78% had treatment completed, 31 or 17.42% were transferred to other institutions. Of these 31, 16 had treatment completed but needed further convalescence in Sanatorium and the other 15 required further treatment.

Twenty-one or 11.8% of discharges were patients who went A.W.O.L., a higher number than the previous year. Of these, however, 8 were returned to Sanatorium and 10 were considered to have arrested abacillary disease, so re-admission was not advised. Three required further treatment but were abacillary and of these three, one was admitted to another institution. So of the non-medical discharges, only 2 required further Sanatorium treatment and no patients went home to stay with positive sputum during 1953.

Of the discharges of pulmonary cases of tuberculosis, 6 or 4.54% were active unimproved. Two of these were transfers to other institutions, 3 were re-admitted, and 1 was abacillary, a maximum benefit case without surgery. Also, of all discharges, 12 had positive sputum. Of these 12, 6 were A.W.O.L. and were later returned to Sanatorium and 6 were transferred so, as stated previously, there were no discharges with positive sputum.

During the year, there were 6 deaths as compared with 13 the previous year. Of these, 4 were considered tuberculous deaths and 2 were non-tuberculous deaths.

TREATMENT

The trend in treatment is away from the old forms of treatment, such as pneumothorax, pneumoperitoneum, and thoracoplasty, and toward prolonged courses of Isonicotinic Acid Hydrazide (I.N.H.), Streptomycin (S.M.), and Para Amino Salicylic Acid (P.A.S.), and excision of tuberculous foci in the lung when drug therapy does not eradicate the disease satisfactorily. At December 31st, 1953, only one patient was receiving pneumothorax and 12 pneumoperitoneum. Three pneumothoraces were attempted but discontinued, and 6 pneumoperitoneums were started and maintained in 1953. As with thoracoplasty, these forms of treatment are reserved for cases not suitable for excisional surgery because of the extent of disease or the condition of the patient. Twenty patients received thoracoplasty operations. Six were primary

ıoracoplasties for the treatment of disease not suitable for resection. Of these 6, had permanent extraperiosteal lucite packs encased in polyethylene sheeting. It ɛems wise to leave the pack in, as removal may cause ballooning of the lung anterırly with re-opening of cavities. The remaining 14 were either post-resectional ıoracoplasties or completion of thoracoplasties started the previous year.

Firty-four patients received pulmonary resection or thoracotomy. Of these, 26 ad lobectomy, 16 partial lobectomy, 2 lobectomy plus segmental resection, 8 pneuonectomy, and 2 repair of bronchial fistulae.

Three resections were done for hydatid disease of the lung, 1 for bronchiectasis, ıd 11 for thoracoplasty failures (5 lucite packs).

We are indebted to Dr. Alexander Gibson, our Orthopedic Consultant, who did 3 orthopedic operations during the year; also to our Anaesthetists, Dr. R. F. Myers, r. Hugh McIntyre, and Dr. Ethel McPhail, for their indispensable services.

X-ray Department. The X-ray Department, under the supervision of Mr. F. H. ibson, R.T., and Dr. C. L. Hsu, Radiologist, has again done outstanding work this ear. 5,413 radiographic examinations were made during the year, an increase of 52 over the previous year. The biggest change during the year is the increased use f the planigram to study lesions at various levels through the chest. Thus cavities, ıberculomas, etc., that are not seen in the ordinary chest film are outlined. Equally nportant is the lateral planigram to accurately localize the lesion and plan preperatively the amount of lung tissue that will require removal. Obviously, this elps in determining whether a case is operable or not. Four hundred and fifty seven lanigrams were done as compared with 68 in 1952.

Also an important function of this Department is the colour photography done n all fresh operative specimens, providing an invaluable record, far superior to ords. One hundred and fifty-two 35-mm. slides were obtained during the year.

Laboratory. Under the direction of Miss L. E. Delamater, R.T., the Laboratory ontinues to keep abreast of the advancements in tuberculosis work. 12,431 Laboratory rocedures were done during 1953, a decline of 1,700 tests under the previous year. his was made possible by reducing the laboratory checks done on patients receiving N.H. Culture work increased to 1,351 from 950 the previous year. Increasingly, putum studies are checked further by culture to give more accurate conclusions.

During the year, in collaboration with Dr. Geo. Elliott, an interesting study was one, when 124 out- and in-patients were tested with 5 fungus antigens and 1 was ound positive for histoplasmin and 1 for coccidiodin, fungus infections rare in this ountry but common in some parts of the U.S.A.

Smears and cultures were done on 39 specimens of resected lung tissue. The perative specimen is kept sterile until examined and is cut with sterile knives, sing a different knife for each tubercular area in the specimen. Thus the speciıens do not require treating before cultures are taken. Of 14 specimens positive y swear, only 2 did not grow tubercule bacilli on culture, a finding quite different om those treating specimens first to eliminate contaminants.

During the year, 342 examinations were done for intestinal parasites. Fourteen atients were positive for *Diphyllobothrium latum* (fish tapeworm), 27 for *Giardia ımblia*, and 5 for *Entamoeba histolytica.*

During the year, the laboratory introduced tests for tubercle bacilli sensitivity ɔ anhydrazide.

Out-Patients examined during 1953 totalled 818.

BUILDING AND MAINTENANCE

We are pleased with the work of the Maintenance Department and Mr. R. N. ewman, Chief Engineer, in keeping the hospital in a continuous state of excellent epair and smooth operation.

A new dishwashing unit was installed in a newly constructed lean-to and the ld dishwashing area re-allocated to a Central Food Service, much improving ppearance and serving of meals.

A water storage tank and pressure pump was installed to increase water ressure in the hospital.

Cinder brick foundations were laid under the Operating Room and Dining Room.

Redecoration has kept buildings in a state of good appearance.

A terrazzo tile floor was laid in the north half of the Operating Room wing.

A third oil burner was installed so that now all three boilers use oil as fuel.

A new Conference Room was constructed next to the Operating Room, so that atients no longer need to come down into the Administration Wing and their eds no longer obstruct the entrance to the hospital. The old Conference Room as been turned over to the Administration Staff and the room left will permit uch needed enlargement of X-ray and Laboratory space.

REHABILITATION

This hospital Department saw a complete change over on September 1st, 1953. The Occupational Therapist, formerly employed by the Federal Government, was taken into the employ of the Sanatorium Board and Mrs. V. Davidson took over this Department. Miss M. Morris and Mrs. J. Deroches, employees of the Department of Indian Health Services, make up the Teaching Staff.

This Department has filled an important role in the therapy of the patients and carried out its function excellently well. In the teaching of a group such as this who have not had the opportunities of receiving an ordinary education, concentration on teaching elementary or pre-high school subjects is important and of far more value to the group as a whole.

At December 31st, 1953, there were 112 patients enrolled in academic work and 88 in occupational therapy.

STAFF

Dr. Gordon Coghlin, 1942 Graduate of the University of Manitoba, joined our Medical Staff on May 11th, 1953. There have been no other major changes in Staff during the year.

I would like at this point to express my extreme gratitude of an able and competent staff. All members, from Department heads down, have shown a keen understanding of their positions and carried out their duties efficiently and well. All have been alert to notice improvements that could be made in their Departments and have shown the ability to carry through these improvements. We are extremely proud of this situation.

EDUCATIONAL

Mr. G. R. Gowing, Business Manager, is at present enrolled in a course in Hospital Administration sponsored by the Canadian Hospital Association.

Dr. C. L. Hsu, this past fall, obtained his Canadian Certification in Radiology and Radiotherapy.

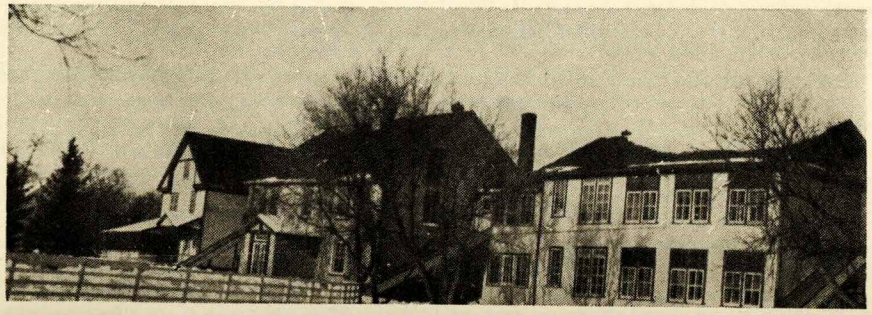
Two medical papers were accepted for publication: 1) "Thoracoplasty with Extraperiosteal Lucite Plombage" appeared in the May issue of The Journal of Thoracic Surgry; 2) "Recent Advancements in the Treatment of Tuberculosis" appeared in the June issue of The Manitoba Medical Review.

The Medical Superintendent was given the exceptional privilege of attending the Annual Meeting of the American College of Chest Physicians held in New York May 27-31, 1953, receiving an invaluable opportunity of keeping abreast of the modern trends in Diagnosis and Treatment of Chest Diseases.

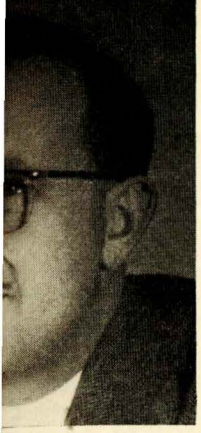
APPRECIATION

In closing, I would like to thank the Chairman and Members of the Board, the Medical and Executive Directors, for their help, guidance, and direction during the year. I would also like to thank Dr. W. J. Wood, Regional Superintendent of Indian Health Services and the Superintendents of our allied institutions for friendly relationships during 1953.

Respectfully submitted,
A. H. POVAH, M.D.,
Medical Superintendent,
Brandon Sanatorium.



Dynevor Indian Hospital



.. CAREY

CLEARWATER LAKE SANATORIUM

AS must be the case in other Sanatoria, 1953 produced a miraculous decline in the death rate and an abandonment of air collapse therapy measures.

Total deaths numbered five, but only four were caused by tuberculosis; a remarkable state of affairs, considering that as recently as 1949, those deceased of tuberculosis at Clearwater Lake Sanatorium, numbered thirty three!

The average bed capacity rose from 160 to 191, 65,255 patient days being utilized in the treatment of Indian and Eskimo tuberculosis.

As an indication of the pendulum swing toward more radical surgery, over fifty patients were transferred to Brandon Sanatorium and other Institutions within the Board, primarly for lung resection.

ADMISSIONS AND DISCHARGES

In the Annual Report of 1952, it was noted that new discoveries within the age group of nine years to infancy were excessive in number. Disconcertingly, this is, once again the case, as in 1953, fifty three children fell into this category. The causative factor would appear to be, that the source of contact, within the home, is still not being removed with sufficient rapidity.

Of 222 admissions, 133 proved to be below the age of twenty four, but reassuring was the fact that fourteen active cases were admitted over the age of sixty, the oldest being 82 years of age!

Of all admissions, fifty percent constituted new discoveries; 92 demonstrated active pulmonary disease, but unfortunately, 57 of these were in the advanced disease category. True readmissions, fourty four in number, formed 20.3% of all admissions and this corresponded favourably with the figure of 20.6% recorded last year.

To summarize, in addition to the Northern Treaty Indian X-ray Clinics and the interpretation of the films, 222 admissions were fully assessed during the year, and over 700 patients were reviewed. A full hospital admission programme was supervised in St. Anthony's Hospital in The Pas and from 2,365 x-rayed, 30 active tuberculosis cases appeared.

CLINICS

The decision was reached in the Spring of 1953, that all northern treaty x-rays would be processed and interpreted at Clearwater Lake Sanatorium and that the admissions would be the responsibility of the medical staff. This proved to be an extremely productive year, as 7,589 large films were developed, as compared to 5,893 in 1952; an increase of 1,694.

In past years there was often a delay of six months or more involved in the admission of patients to sanatoria. This year, all cases requiring treatment, from The Pas and Nelson River Agencies, were admitted within three to four weeks.

An effort has been made to record the disease classifications of these admissions:

Minimal	Moderately Advanced	Far Advanced	Primary Infection
11	10	7	6

Unfortunately, the proportion of advanced cases remains high and should stress the need of this valuable programme. Conversely, relapses were infrequent and a special point of surgical interest lies in the fact that 17 patients discharged with thoracoplasty were all classified as showing arrested disease, as were 7 post-resection cases. Arrested disease also manifested itself in a further 179 cases.

Every effort was made to investigate all those with x-ray appearances suspicious of disease, and of seventy four examined as out patients, eighteen remained for treatment.

The inhabitants of the far northern Eskimo areas of Chesterfield Inlet, Repulse Bay, and Baker Lake were x-rayed. The findings were reminiscent of the earlier days of Indian Clinics.

At the three points respectively, 157, 121 and 102 Eskimos were plated.

At Chesterfield Inlet, twenty active cases of pulmonary tuberculosis were discovered, with four emerging from each of the other two points!

Two Eskimos died prior to admission and eight of the others were in a disease classification of moderately advanced, or worse. This, of course, is virgin territory and in the future of a more extensive programme should prove fruitful.

STAFF

The standard of nursing was improved by the acquisition of two registered nurses frome Ireland, and although the framework of the nursing staff here, is built up of practical nurses, the registered nurses prove indispensable in supervisory capacities.

In May of 1953, Dr. F. P. Hulke, arrived from Ninette and assumed full duties in June. He proved himself reliable and well able to assume responsibilities.

Dr. E. Mishima, originally from Japan, accepted an appointment at the Sea View Hospital in New York and in July, Dr. and Mrs. Muehlenbeck, after seventeen months of employment, left for Regina. In August, the latter was replaced by Dr. R. Burmeister, a welcome addition to the staff.

Mr. Carl Christianson has once again rendered excellent service to the Sanatorium in his capacity as Business Manager. All Department Heads and staff in general are to be commended for their cooperation, and interest in the institution.

ACADEMIC TEACHING—ARTS AND CRAFTS

A full teaching programme is effective at Clearwater under the direction of Miss Marion. Enrolment in the classroom has increased, with a coincidental rise in bedside teaching. As a result of the centralization of the tray services, two diet kitchens were vacated. One of these was transformed into a badly needed classroom and the other, into an Occupational Therapy workshop.

In July, Mrs. P. Hill, was transferred to Dynevor Indian Hospital and was later replaced by Miss O. Kischook, formerly of Fort William Sanatorium. Miss Kischook, qualified in Arts and Crafts, has endeavoured to promote native art and self expression among Indians.

TREATMENT

In the treatment of tuberculosis, the chemotherapeutic agents of Streptomycin, PAS and Isonicotinic Acid Hydrazide, were widely employed. Streptomycin therapy was induced in 107 cases during the year and 91 received INH, and, as has been stressed in Medical literature, the combined therapy proved the more efficacious. Although there were only five deaths, it is felt that in some instances, lives have been prolonged which ultimately may become chronically institutionalized lung cripples.

Laboratory.—A total of 7,797 examinations were performed and greater stress was placed upon gastric cultures; 200 of these were carried out during the year. From the deaths, totalling five, four autopsies were performed.

X-ray.—A grand total of 9,345 x-rays were developed in 1953, as compared to 9,175 in 1952, the increase occurring in the Clinic attendances.

By the construction of a new dark room, working conditions were improved, and with the installation of a tomogram, fuller diagnostic facilities were made available.

General.—In February 1953, the Annual Meeting of the Medical Association North of '53 was held, for the first time, at the Sanatorium. In attendance were fifteen doctors from Flin Flon, The Pas and Winnipeg. A paper was presented by the Medical Superintendent, entitled "An Assessment of the Effects of INH in the Treatment of Pulmonary Tuberculosis".

In March a "Symposium of the First Post Graduate Course in Tuberculosis" was also completed.

The recent acquisition of new X-ray viewing boxes, new bronchoscopic instruments and tomogram has, immeasurably improved the medical services.

In December, three cases of poliomyelitis arose in the hospital nursery, the diagnosis being established by spinal puncture and, later, by the onset of paralysis. All three children had been in-patients for several months, under treatment for pulmonary tuberculosis, and all were in the same ward. The base area was placed in quarantine and every precautionary measure was taken.

With the transfer of the infants to St. Anthony's Hospital, no further outbreak occurred.

MAINTENANCE

With the growth of the Institution, various changes were found necessary in order to improve the efficiency and appearance of many departments.

At the beginning of the year, a new wing was constructed to house the domestic staff and the vacated wing was refloored and decorated, affording a Male Children's Ward which is now occupied by 36 patients.

Coincidentally, a new Medical Superintendent's residence was completed, thereby providing, in all, three residnces for medical staff; two houses and one large suite.

The water heating supply was centralized by the installation of a 600 gallon tank and by procuring a second oil burner, the conversion from coal to oil was completed. This has resulted in a more uniform source of heat, and a conservation of labour.

The Hospital Canteen was reshaped to accommodate the new automatic dial telephone system, and along one wall, a glass cabinet was inset, for the display of Indian Craft.

A new Hospital sign was placed at the entrance to the Institution and, in the early summer, to assist in maintaining discipline, road signs and barriers were erected on the grounds. Earth was hauled in and the difficult task of landscaping over the sandy soil, commenced.

It had been noted for some time that the foundation under the administration wing had been sinking, consequently, the building was jacked up and cement foundation pads and cinder blocks, were packed underneath. These are of a more permanent nature and improve the appearance of the wing.

The Sanatorium water tower was reinforced, and, by the close of the year, work was well in progress to enlarge the conference room and x-ray department.

By the sacrifice of an unused casualty room, it was found possible to provide a new dark room, with light-lock facilities, and, by the removal of one partition, the width of the Conference Room was increased by 6 to 8 feet.

The need of new residences is a pressing problem and the construction of a Recreational Centre might be anticipated in the coming year.

APPRECIATION

My sincere appreciation is extended to the Chairman of the Board, Mr. D. L. Mellish; to the Chairman of the Clearwater Lake Committee, Mr. R. H. G. Bonnycastle; and to all Members of the Sanatorium Board.

In particular, I am extremely grateful to Dr. E. L. Ross, the Medical Director, for his medical advice and counsel, and to Mr. T. A. J. Cunnings for his direction in administrative matters.

To Dr. W. J. Wood, Dr. R. F. Yule, and to Dr. B. Claman, our gratitude is extended for their close cooperation.

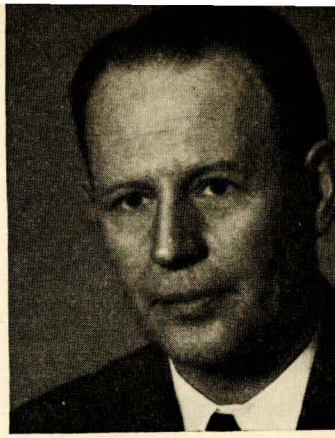
Dr. C. Crawford, surgical consultant to the Sanatorium, has proved most willing to assist in our problems and we look forward to a continuance of this relationship.

During 1953, close contact was maintained with our medical colleagues in The Pas, with Sister Superior at St. Anthony's Hospital and with the Public Health Directors in Flin Flon and Swan River. We also gratefully acknowledge the cooperation of the nurses, dispensers, and agents with whom we have had contact.

Respectfully submitted,
STUART L. CAREY, M.D.,
Medical Superintendent.

gaily decorated Christ-Tree and the prospect of ing presents are viewed a mixture of awe and ctancy by these two In-boys at Clearwater Lake Sanatorium.

ST. BONIFACE SANATORIUM



DR. A. C. SINCLAIR

A very busy year has been just completed at St. Boniface Sanatorium. The total number of hospital treatment days was 100,613, which is 701 less than for 1952 when it reached a record high of 101,314.

These figures represent a great deal of work on the part of the staff: work which is becoming more and more difficult due to the increasing amount of tension, instability and general unrest which is being found in the average patient.

The year began with 276 patients in residence and ended with 272. The average daily occupancy was 98.4% of capacity.

ADMISSIONS AND DISCHARGES

Two hundred and twenty patients were admitted to treatment. Of this number 184 (83.6%) received treatment for tuberculosis of the respiratory system, the remainder being classified as having extra pulmonary tuberculosis. The ratio of minimal, moderately advanced and far advanced has not varied significantly in recent years.

Two hundred and twenty-four patients were discharged. Of this number 60.3% had completed treatment and 6.7% were transferred to other Institutions. The death rate among discharges was 8.9% as compared to 8.7% in 1952. This figure includes three surgical deaths, directly or indirectly related to thoracic surgery.

Individuals discharged against medical advice—24.1%—represents some patients who were re-admitted to our Institution a few days later or to another Institution, either of their own free will or after persuasion by the Health Workers in the field, so that the picture in this regard is not too alarming.

One hundred and seventy-five pulmonary cases were classified on discharge as follows: inactive 2.3%; arrested 40.6%; active improved bacillary 9.7%; active improved non-bacillary 35.4%; active unimproved 2.3%; deceased 9.7%.

TREATMENT

Streptomycin and its allied chemicals are still producing excellent results and have practically replaced pneumothorax, which was the main stay of treatment for so many years. These chemicals have proved so effective that not a single case of pneumothorax was started in 1953, although there are still a considerable number of pneumothorax cases being carried as a back log from previous years.

Thoracic Surgery.—To remove the diseased portion of a lung has long been the dream of the surgeon. It is now possible to open a chest with this technical procedure in mind. Thirty-two of these operations were done last year with very gratifying results. It is anticipated that the number so treated next year will be doubled if not tripled. But before surgery can be applied, sufficient rest and chemotherapy must be given to remove the patient from the active to the healing stage of his disease. This accounts for the fact that the length of treatment has actually increased as compared to former years. The results, however, are better and the relapse rate has been reduced.

The average length of Sanatorium treatment of the 224 persons discharged last year was 441 days, or approximately 15 months.

Orthopaedic Surgery.—Approximately 10% of our patient population is comprised of patients receiving treatment for bone and joint tuberculosis. Dr. Henry Funk, a Consultant in this Department, has outlined the treatment and carried out most of the technical problems. He has rendered excellent service and the results have been good.

Teaching of Nurses and Medical Students.—Practical Nurses from the St. Boniface Training School spend three months in the Sanatorium during which time they receive instruction and regular lectures. Medical Students from Third Year receive three hours instruction weekly during the teaching term. Twelve internes from St. Boniface Hospital each spend one month in the Sanatorium. Part of the Fourth Year Class is on a rotating service. Three Students come for a week at a time. This effort, on the part of the Medical Staff, is made to improve the treatment of the tuberculous of this Province and to advance the Anti-tuberculosis Program.

Occupational Therapy.—The Department of Occupational Therapy has been active during the year and is supervised by Miss Swatland. The Department of Rehabilitation, supervised by Mr. Metcalfe, under the direction of the Sanatorium Board of Manitoba; the Handicraft Department, supervised by Mr. Alex Vermette; and the School being operated by Miss J. Molin and Miss G. Hornick, have all contributed to the treatment and the smooth operating of the Institution.

FINANCIAL

The cost of treatment has been gradually rising since the end of the war. This fact is well known to the Sanatorium Board of Manitoba and to the Department of Health, and accounts for their yearly upward revision of budgets which affect all Manitoba Sanatoria. At Glen Lake Sanatorium near Minneapolis, the cost per patient day has risen in the last 20 years from approximately $3.00 per day to approximately $14.00. One of the western Provinces now finds that their per diem cost is in the neighborhood of $11.00 or $12.00.

I will now quote from a section of the Auditor's report as prepared by John Shelly and Company:

"The operating statement for the year 1953 shows a deficit of $88,058.26 compared with $27,214.41 twelve months ago and $65,661.48 two years ago. The following is a comparative summary of the operating income and expenses for the last three years:

	1953	Per Diem	1952	Per Diem	1951	Per Diem
Operating & other income	$434,473.65	$4.32	$432,856.10	$4.27	$372,575.21	$3.80
Operating Expenditure	$522,531.91	$5.19	$460,070.51	$4.54	$438,236.69	$4.47
Operating Deficit	$ 88,058.26	$ .87	$ 27,214.41	$ .27	$ 65,661.48	$ .67
Hospital treatment		100,613 days		101,314 days		98,015 days

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 on 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. Vital, Manitoba.

St. Boniface Sanatorium, Main Entrance

Winnipeg Municipal Hospitals
KING EDWARD MEMORIAL HOSPITAL

DR. J. A. HILDES

I beg to submit this report of the activities of the Tuberculosis Division of the Winnipeg Municipal Hospitals for 1953.

TREATMENT

During the year there were 130 admissions and 145 discharges. This is a further decrease over previous years and continues the downward trend.

Antibiotics are now the major specific agents of treatment. The limits of their effectiveness being fairly well established, it was considered reasonable to carry 58 selected patients on antibiotic treatment as out-patients under close supervision.

No patients were started on pneumothorax or pneumoperitoneum, nor were there any phrenic crushes attempted during the year. Resection is now regarded as the surgical treatment of choice. Only one primarly thoracoplasty was performed during the year compared to nine patients subjected to pulmonary resection. These operations were carried out at the Winnipeg General Hospital by Dr. Perrin. This arrangement with the Winnipeg General Hospital is not completely satisfactory: there is usually a delay in obtaining surgical beds for tuberculosis patients; the immediate pre- and post-operative care is not in the hands of those familiar with the patients or with their disease; and there is difficulty in segregating infectious cases on the surgical wards. It is hoped for 1954 to complete arrangements that will allow these cases to be handled at the Winnipeg Municipal Hospitals.

Two spine fusions and eight applications of plaster casts were carried out by the orthopaedic surgeons at the hospital.

There were 11 deaths and 9 post mortem examinations. Four of the deaths were due to non-tuberculous causes; two cases of bronchogenic carcinoma, of which one had no tuberculosis.

STAFF

The Medical staff was increased by the addition of Dr. James B. Morison. As in 1952, the staff of the tuberculosis division took on extra and onerous duties during the severe poliomyelitis epidemic. Physicians with special skill and experience with chest diseases are invaluable to the staff of the other hospital divisions in the management of poliomyelitis with respiratory complications.

Dr. MacDonell attended the meeting of the American College of Chest Physicians in New York in May and the meeting of the Canadian Tuberculosis Association in Montreal in June.

Clinical and pathological problems of patients coming to autopsy were reviewed at monthly evening staff meetings. Weekly ward rounds to discuss all new admissions and all potential discharges as well as problem cases were held regularly except from July to October when poliomyelitis was rife. Drs. MacDonell and Schaberg presented the cases with amyloidosis at one of the monthly clinical luncheons held in the auditorium of the Princess Elizabeth Hospital. The chairman of the Medical Advisory Committee attended some of our Thursday morning ward rounds but it is a disappointment to the staff that more of the chest physicians in the city do not occasionally attend to give us the benefit of their experience.

The medical staff continued the teaching programme of clinical clerkships for fourth year medical students throughout the academic term.

The nursing staff was depleted by the loss of Mrs. M. Thorne, Nursing Supervisor, who left to take up residence in California. We were very fortunate in prevailing on Mrs. A. J. MacMorran to take over this key position. The nursing staff gave unstinted help to their hard-pressed colleagues on the polio wards. The training programme for affiliated student nurses was continued.

The X-ray technical staff was increased by a student trainee. X-rays were taken on in-door and out-door patients and 297 admission survey chest films were taken on all patients over 15 admitted to the other divisions of the Municipal Hospitals.

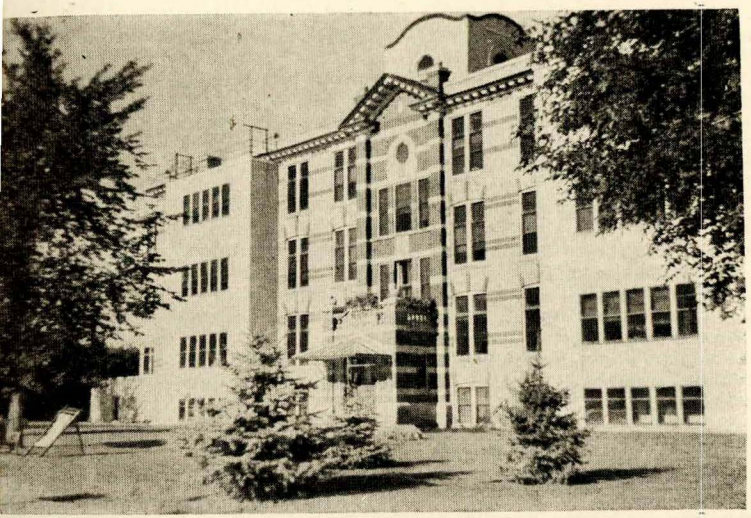
There was no change in the laboratory staff whose work continues at a high calibre in spite of increased load.

At the time of writing this report there are indications that it is the intention of the Sanatorium Board to stop the treatment of tuberculosis at the King Edward Memorial Hospital. After 40 years of active and proud participation in the fight against this disease in Manitoba a disturbing air of uncertainty pervades the hospital.

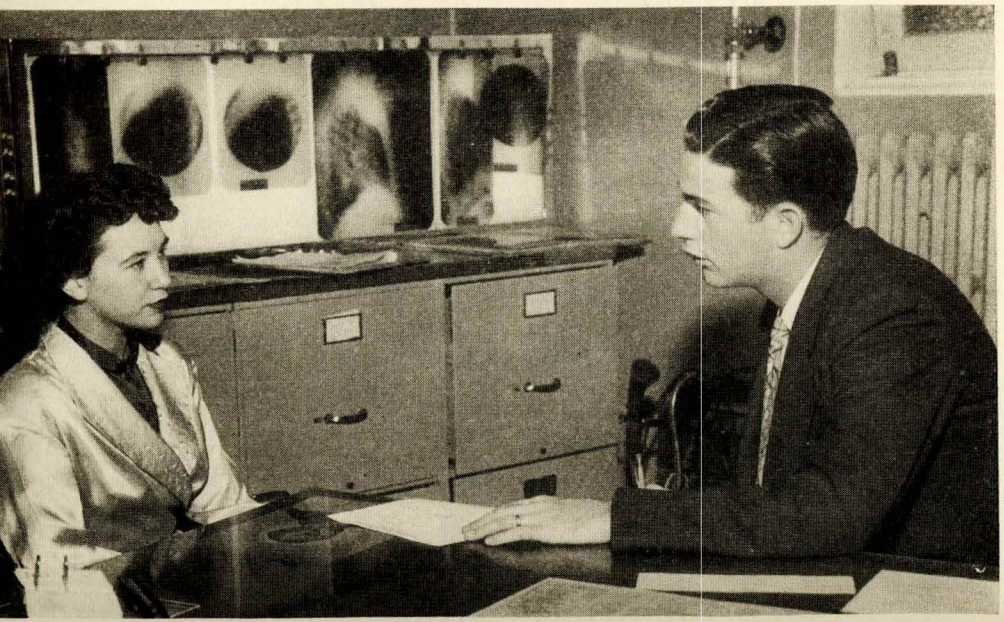
ACKNOWLEDGMENTS

I wish to thank my colleagues on the staff. Not only did they help, but they sumed the entire burden of patient care during the year. The standard of nursing re and the excellent services offered by the laboratory and x-ray staff deserve special ention. I wish also to express my appreciation to the Chairman and Members of e Hospital Commission and to the Administrator and his staff for their help and -operation. The Rehabilitation Division, and particularly Miss G. Motheral, were ry helpful in patient education and diversional occupational therapy. The City Health epartment's visiting nurse attended weekly. The Augustine Business Girls Study lub has taken an active and important interest in the welfare of our patients.

Respectfully submitted,
J. A. HILDES, M.D.,
Medical Director.

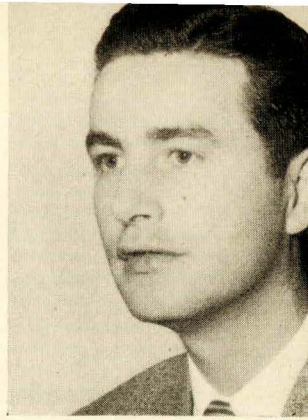


King Edward Memorial Hospital



Re-Employment

Report of the REHABILITATION DIVISION



MR. E.G. METCALFE

RESEARCH in the field of rehabilitation by the Instruction in the vocational arts in our institutions "the chief longing of the physically handicapped person is to achieve independence within a normal community, instead of spending the rest of his life in a segregated institution, or within an environment of disability." Recognizing this as the prime motive in the mind of the tuberculosis patient, the rehabilitation division of the Sanatorium Board of Manitoba is geared to help this "longing" a reality.

Instruction in the vocational arts in our institutions is therefore the form of activity most recommended to the patient. A relatively short period of training usually results in his being placed in a satisfactory wage-earning capacity within a few months after his doctor says he can return to work. A person with limited ability for any type of work can frequently become a competent technician through the facilities available. Result—a satisfactory readjustment to work and society.

Thus the vocational instructor is the nucleus of any sanatorium training program and our instructors in Manitoba have contributed greatly to the general field of rehabilitation during 1953.

Since tuberculosis treatment involves the confinement in hospital of a cross-section of our population, it is inevitable that some academic instruction be included in our curriculum. However, this part of our program is organized to prepare those patients with lower grade school standings for subsequent vocational training. The results are gratifying and many such patients are moving on from the academic field into vocational training.

This has been a satisfactory year from the point of view of in-sanatorium activity. The number of patients enrolled shows a percentage increase of 27% over 1952. Of the 170 involved in vocational training, less than 2% availed themselves of the facility for the purpose of reviewing training taken previously. This means that the emphasis on the part of our staff is directed primarily toward the instruction of patients hitherto untrained.

PERSONNEL

The instructional staff throughout the Sanatorium Board underwent only one change during 1953. This is an extremely favorable trend since it means our instructors are being provided, as individuals, with a continuing experience in the field of rehabilitation work with the tuberculous. It also means that, as a group, the staff is working in harmony as a well integrated team. To the patients, the value of such a situation is obvious.

At the Manitoba Sanatorium, Miss Margaret Busch continued her duties during the year as Supervisor of Rehabilitation. Miss Hazel Carlson resigned her position on July 10. Her place was taken early in September by Mr. Guy Hamel, former teacher. Mr. Hamel has adapted himself easily to the problems of institutional work and is a valuable addition to our staff. Miss Gertrude Manchester, who has been with us since 1951, continued as one of our senior instructors. Miss Mildred Johnston, our Home Economist, carried on her interesting series of lectures to the housewives on the problems confronting the ex-patient in regard to homemaking. Mr. Hjalte Davidson continued working as assistant in the Craft Shop while Mr. R. Kahler was employed as librarian.

In Winnipeg, Miss Gladys Motheral continued her four-year association with the Sanatorium Board at the King Edward Memorial Hospital as Occupational Therapist and vocational instructor.

At the St. Boniface Sanatorium in St. Vital, Miss Jeanne Molin began her first full year on our instructional staff and has made a valuable contribution. In addition to having teaching experience, Miss Molin is well versed in typewriting and bookkeeping.

The craft shop at St. Boniface, supervised by Mr. Alex Vermette, is very popular with the patients. Mr. Vermette has a thorough knowledge of all phases of the work and the patients progress well under his guidance.

IN-SANATORIUM TRAINING

Manitoba Sanatorium

Patients engaged in pre-vocational training	188
Patients receiving vocational instruction	102
Number of units completed	57
Patients enrolled at University	1
Patients engaged in occupational therapy	116
Patients engaged in homemaking	129

Work in vocational courses at the Manitoba Sanatorium showed very good pro-ess during the past year, with 102 patients registering with the school. Typewriting id bookkeeping continued to be the two most popular courses. Five of 27 enrolled typing completed the course as did 3 out of 13 enrolled in bookkeeping. Much edit is due these patients and their instructors.

The occupational therapy department was without a therapist for most of 1953. good deal of the work in the divison has contnued, however, because of the will-igness of the other instructors to devote a few minutes of their time each day to ie therapy division.

The homemaking, which is now into its second year at the Manitoba Sanatorium, still arousing a good deal of interest among the female patients. During 1953 all hases of homemaking—cooking, sewing, interior decorating—were illustrated and he homemakers in the sanatorium are deriving much useful information from Miss ohnston's lectures. While the sewing course was in progress, 22 garments were ompleted by the patients. For the most part, the ambulant patients do their work n the sewing machine while infirmary patients do all their garments by hand.

King Edward Memorial Hospital

Patients engaged in pre-vocational training	24
Patients receiving vocational instruction	29
Number of units completed	28
Patients engaged in occupational therapy	129

Despite a marked decrease in the overall patient population of the King Edward Memorial Hospital during 1953, there has been a very noticeable increase in the num-ber of patients taking vocational training. The figure for 1952 was 18. And with this ncrease in vocational activity, there has been a corresponding drop in the occupa-ional therapy enrollment.

Not being equipped with power tools, the therapy section of the hospital cannot serve as the valuable aid to vocational training that the St. Boniface Sanatorium does. However, the women patients do derive considerable benefit from the depart-ment. Miss Motheral is familiar with the various household handicrafts and, in addition, gives the patients instruction in both hand and machine sewing.

St. Boniface Sanatorium

Patients engaged in pre-vocational training	50
Patients receiving vocational instruction	39
Number of units completed	50
Patients engaged in workshop	116
Patients engaged in occupational therapy	211

Considering the fact that our instructor at St. Boniface is one of our newer staff members, the work at that institution in 1953 has been satisfactory. Whereas the ncrease in patients' enrollment was only 4, from 35 in 1952 to 39, the increase in nit output tripled, from 16 to 50. This is indicative of a comprehensive approach to he situation on the part of Miss Molin, since it shows a sustained interest by the atients in the study program.

The workshop serves a useful purpoe in that, in addition to providing a form of ecreation, it also gives the patients experience in the use of power-operated tools nd in the safe operating of the machines. Many of the patients using the facilities f the shop are persons who have as vocational goals types of work which will equire use of similar machines. Mr. Vermette reports that, of the 48 patients actually nrolled at the year's end, 19 are bedside patients who use the portable drills and anders provided in the shop.

During 1953, a new sanding machine was purchased and this has been of great alue, particularly in the polishing and grinding of plastics.

The Occupational Therapy section, under Miss Eva Swatland, was again extremely ctive throughout the year. The new skills the patients learn result in the creation f many lovely articles. They also teach the patients how to use leisure time intel-igently and the importance of this particular aspect cannot be over-emphasized.

Clearwater Lake Sanatorium

Rehabilitation work at Clearwater was capably handled by Miss A. Marion, [illegible] and from November by Miss O. Kischook, Occupational Ther-tinue with their school work on the one hand, and instructing them in new types of arts and crafts on the other. The constant interest of Dr. S. L. Carey, Medical Superintendent, has been extremely helpful.

Brandon Sanatorium

Increased activity in the academic field was reported by Miss Mary Morris and Miss Jeanne Deroche, academic teachers. Several of the patients are working toward an eventual vocational training course and such courses will be instituted as soon as academic standing permit. The Occupational Therapy section, under Mrs. Vera Davidson, again made an important contribution to the general rehabilitation program.

To Dr. A. H. Povah, Medical Superintendent, we extend our sincere thanks for his interest and cooperation.

Dynevor Indian Hospital

During the early part of the year, Dynevor was without a rehabilitation instructor. However, Mrs. Pauline Beauchemin, previously employed at Clearwater Lake, assumed her duties as academic and arts and crafts instructor in late summer. The patients are extremely interested in the program and the results at Dynevor are gratifying. The sympathetic attitude of Dr. W. Read, Medical Suprintendent, toward patient rehabilitation problems is gratefully acknowledged.

POST-SANATORIUM TRAINING

One of the most important aspects of the general program is the facilities for post-sanatorium training that are offered. Correspondence study while confined to the hospital is extremely necessary, but without in-school tuition, the patient is not likely to become a polished technician. It is gratifying, therefore, to note that these training facilities are being liberally used by the patients. Statistics for 1953 are as follows:

Patients training at the Manitoba Technical Institute	13
Patients attending high school	4
Patients attending Normal School	1
Chartered accountancy	1
Barbering	1

Appreciation is expressed for the sustained interest in our work on the part of the vocational training counsellors of the National Employment Service. Their excellent service insures that interested patients are accommodated with a minimum of delay.

JOB PLACEMENT

This important part of our rehabilitation program was again effectively carried on through the National Employment Service, with all of our ex-patients being given prompt and sympathetic attention. Seasonal lags in certain vocational fields sometimes cause unfortunate delays but as soon as the employment situation returns to normal, patients thus deferred are quickly accommodated.

THE MESSENGER OF HEALTH

No report would be complete without some mention of our monthly magazine, which has been in continuous publication since March 1938. From a mimeographed periodical it has grown into what one might call an extensive business. It prints news and articles which are primarily intended for our own patients and staff but, through its high standard of publication, has also gained an international reputation. Our thanks to all those who helped the Messenger through another highly successful year.

APPRECIATION

Without our fine correspondence training program, much of our in-sanatorium work could not be accomplished. To the Department of Education in general, and to Mr. L. S. Smith and Mr. C. J. Hutchings of the Correspondence Branches in particular, sincere appreciation is expressed for their prompt attention to patients' applications.

To Miss E. J. Wilson and her staff at the Central Registry, thanks are extended for the constant and liberal use made of their records. These are extremely important in the referral of discharged patients to the National Employment Service, and aid in prompt and efficient placement.

The rehabilitation process begins at the time of admission to the sanatorium and, at this point, the cooperation of medical and administratve personnel is vital. This cooperation continued throughout 1953 and the invaluable assistance of Dr. Paine, Dr. Sinclair and Dr. Campbell of the Sanatoriums, and of Dr. Ross, Dr. Scott, and Mr. Cunnings is deeply appreciated. It has made the task of carrying on the work of the Division very much easier.

Respectfully submitted,

(Sgd.) E. G. METCALFE,

Director of Rehabilitation

Records

CENTRAL TUBERCULOSIS REGISTRY

	Whites		Reported as: Indians		Eskimos	
	1952	1953	1952	1953	1952	1953
atients on File, Dec. 31	**3,507**	**3,115**	**1,917**	**1,208**	**19**	**55**
Primary type	28	24	78	25	—	1
Re-infection type	3,479	3,091	1,839	1,183	19	54
ew Cases diagnosed in Manitoba January 1—December 31	**686**	**656**	**231**	**246**	**2**	**47**
Primary	22	25	25	31	....	5
ReInfection	664	631	206	215	2	42
f these, New Active Cases—Classified	**368**	**346**	**182**	**165**	**2**	**44**
Primary type	22	25	25	31	....	5
Minimal	93	88	42	46	1	11
Moderately advanced	66	73	30	39	....	12
Far advanced	58	50	23	22	....	10
Pulmonary tuberculosis, extent not stated	19	17	9	7	....	1
Tuberculous pleurisy	32	43	13	6	1	....
Non-pulmonary tuberculosis	78	50	40	14	....	5
ew Diagnoses admitted to Sanatoria	241	223	134	112	1	19

STATIONARY AND TRAVELLING CLINICS AND SURVEYS

	Whites	Indians	Eskimos
XAMINATIONS at all clinics and surveys Jan 1.—Dec. 31, 1953	**216,799**	**12,573**	**384**
Stationary Clinics	10,091	40	6
Travelling Clinics	4,630	73	....
Surveys—in Manitoba	202,055	12,433	378
—outside Manitoba (Sanatorium Board)	23	27	....
EW CASES of tuberculosis diagnosed at Clinics and Surveys	477	133	34
Stationary Clinics	168	13	6
Travelling Clinics	32	2	....
Surveys—Manitoba	277	118	28
f these, new cases of Primary Infection Type	**19**	**14**	**4**
Stationary Clinics	11	3	1
Travelling Clinics	7	....	....
Surveys—Manitoba	1	11	3
ew Cases of Re-infection type	**458**	**119**	**30**
Stationary Clinics	157	10	5
Travelling Clinics	25	2	....
Surveys—Manitoba	276	107	25
ONTACTS EXAMINED at clinics	**6,146**	**37**	....
Stationary Clinics	3,298	4	....
Travelling Clinics	2,848	33	....
LD TUBERCULOUS PATIENTS REVIEWED	**5,344**	**505**	....
Stationary Clinics	3,785	4	....
Travelling Clinics	677	27	....
Surveys—Manitoba	882	474	....
neumothorax Treatments given at all stationary clinics	**4,495**		

INSTITUTIONAL STATISTICS

	Whites		Reported as: Indians		Eskimos	
	1952	1953	1952	1953	1952	1953
PATIENTS IN SANATORIA as at December 31	**615**	**602**	**478**	**485**	**13**	**28**
PATIENTS ADMITTED to Sanatoria January 1 to December 31	791	812	395	387	5	33
Tuberculous patients admitted	711	725	304	297	1	23
First Admissions	**296**	**300**	**198**	**184**	....	**23**
Primary type	9	8	23	18	....	1
Re-infection type:						
Minimal	79	81	40	53	....	2
Moderately advanced	67	88	49	50	....	8
Far advanced	64	63	37	37	....	8
Tuberculous pleurisy	29	38	9	5	....	....
Non-pulmonary tuberculosis	48	22	40	21	....	4
Re-admissions	**328**	**317**	**91**	**101**	**1**	....
Primary type	....	2	1	4	....	....
Re-infection type:						
Minimal	52	50	18	31	....	...
Moderately advanced	90	110	38	26	....	....
Far advanced	151	121	17	27	....	....
Tuberculous pleurisy	3	5	3	3	....	....
Non-pulmonary tuberculosis	32	29	14	10	1	....
Patients admitted for review	**87**	**108**	**15**	**12**	....	....
TUBERCULOUS PATIENTS Transferred	**236**	**255**	**125**	**108**	**1**	**10**
PATIENTS DISCHARGED from Sanatoria January 1 to December 31	817	830	412	392	5	16
Tuberculous patients discharged	**734**	**738**	**320**	**305**	**2**	**8**
Discharged after review	87	108	14	12	....	....
Discharged with inactive tuberculosis	96	90	118	66	....	1
Discharged with arrested tuberculosis	249	246	114	114	2	3
Discharged with act. imp. tuberculosis	180	205	34	92	....	2
Discharged with act. unimp. tuberculosis	76	51	14	9	....	....
Discharged dead	46	38	26	12	....	2
Discharged against medical advice	**91**	**91**	**13**	**24**	....	...

BALANCE SHEET as at 31st DECEMBER, 1953

MANITOBA SANATORIUM, SPECIAL FUNDS AND CENTRAL TUBERCULOSIS CLINIC

ASSETS

	Manitoba Sanatorium	Central Tuberculosis Clinic	
ash on Hand and in Bank	$ 1,500.00	$ 200.00	$ 1,700.00
ccounts Receivable:			
General Account:			
Treatment account	70,630.70	11,775.20	
Federal health grant	1,690.00	4,957.79	
Special grant	2,154.97	5,995.03	
Provincial Government:			
Capital grants	66,319.30	—	
Reciprocal accounts	6,953.50	475.50	
Federal Government	4,769.75	1,071.75	
Other	1,933.36	925.00	
	154,451.58	25,200.27	179,651.85
equests:			
Estate of John Yellowlees, deed of land	1.00		1.00
nventories and Deferred Charges:			
Supplies on hand, per Schedule "I"	41,588.02	10,331.12	
Deferred charges	3,221.15	137.66	
	44,809.17	10,468.78	55,277.95
and, Buildings, Plant and Equipment:			

	Cost	Depreciation Reserve	Book Value	
Land and improvements	$ 10,852.71	$ —	$ 10,852.71	
Buildings	682,358.62	497,860.07	184,498.55	
Plant and machinery	179,612.86	98,978.34	80,634.52	
Furniture	24,746.48	17,356.14	7,390.34	
Equipment	156,698.78	71,130.88	85,567.90	
Automobile	2,288.42	1,636.66	651.76	
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	12,304.27	5,167.72	7,136.55	
Construction in progress:				
Nurses' home	23,167.92	—	23,167.92	
	$1,098,215.12	$698,314.87	$399,900.25	
Furniture and equipment Central Tuberculosis Clinic	3,336.93	759.15	2,577.78	
	$1,101,552.05	$699,074.02		402,478.03
eneral Account:				
Provincial Government:				
Treatment account			$195,225.60	
Special grant			8,750.00	
Federal health grant			22,488.27	
Other			14.35	
				226,478.22
ndowment Fund No. 1:				
Cash in bank			5,722.57	
Investments			104,955.00	
Accrued interest on investments			914.12	111,591.69
ndowment Fund No. 2:				
Cash on hand and in bank			80,025.31	
Accounts receivable:				
Dept. of National Health and Welfare, Indian health services			3,845.20	
General account—Federal health grant			2,867.64	
Other			448.38	
Investments at par, Schedule "6"			18,000.00	
Accrued interest on investments			128.20	
Inventories and deferred charges			1,192.30	
Fixed assets:				
Vehicles and mobile units	$ 23,859.14			
X-Ray and similar equipment	40,551.98			
Furniture and other equipment	13,715.47			
	78,126.59			
Less: Reserve for depreciation	68,237.50		9,889.09	116,396.12
nployees' Emergency Fund No. 1:				
Cash in bank			350.94	
Investments at par, Schedule "6"			17,000.00	
Accrued interest on investments			104.22	17,455.16
nployees' Emergency Fund No. 2:				
Cash in bank				430.01
ilding Fund:				
Cash in bank				7,050.09
				$1,118,510.12

LIABILITIES

	Manitoba Sanatorium	Central Tuberculosis Clinic	
Bank of Montreal:			
Current account	$ 84,715.77	$ 7,350.07	
Demand loan	50,000.00	—	
	$134,715.77	$ 7,350.07	$ 142,065.84
Accounts Payable:			
Trade	20,550.94	3,248.68	
Contract holdback and other	12,387.67	2,300.67	
Accrued wages	8,039.22	4,084.98	
Accountable supplies	—	4,036.59	
	40,977.83	13,670.92	54,648.75
Patients Store and Contingent Account, Schedule "3"	1,030.30		1,030.30
Capital Surplus, Schedule "7"	176,183.76		176,183.76
Surplus:			
Balance at 31st December, 1952	263,806.50	16,113.45	
Add: Contributed capital assets, Federal health grant	5,418.90	—	
Revenue adjustment, prior years	110.10	—	
Inventory adjustment	188.16	—	
	269,523.66	16,113.45	
Deduct: Revenue adjustment, prior years	—	57.60	
Excess of expenditure over income, Exhibit "B"	20,157.22	242.11	
	20,157.22	299.71	
	$249,366.44	$ 15,813.74	265,180.18
General Account:			
Bank of Montreal—overdraft		$ 12,509.21	
Treatment account:			
Manitoba Sanatorium	$ 70,630.70		
Central Tuberculosis Clinic	11,755.20		
Others	112,819.70	195,225.60	
Special grant		8,150.00	
Federal health grant		9,515.43	
Other		1,077.98	226,478.22
Endowment Fund No. 1:			
Capital account, Exhibit "C"		111,591.69	111,591.69
Endowment Fund No. 2:			
Accounts payable		5,662.92	
Accrued wages		2,443.11	
Capital account, Exhibit "C"		108,290.09	116,396.12
Employees' Emergency Fund No. 1:			
Capital account, Exhibit "C"		17,455.16	17,455.16
Employees Emergency Fund No. 2:			
Capital account, Exhibit "C"			430.01
Building Fund:			
Capital account, Exhibit "C"			7,050.09
			$1,118,510.12

D. L. MELLISH
Chairman of the Board

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

The Chairman and Members,
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, 1953. 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 provisions for interest on capital invested. With minor exception, 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 the affairs of Manitoba Sanatorium, Central Tuberculosis Clinic and Special Funds as at 31st December, 1953, according to the best of our information, the explanations given to us and as shown by the relative records.

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

Thank You

THE SANATORIUM BOARD EXTENDS SINCERE THANKS TO THOSE NAMED BELOW, IN RESPECT TO THE INSTITUTIONS THEY HAVE HELPED:

MANITOBA SANATORIUM

Clergy

Belmont: Mr. Hopper, Student, Anglican Church—**Brandon:** Rev. Erick Schmiege, Lutheran Church; Rev. Father O. Tarnowecky, Greek Catholic Church—**Bottineau, N.D.:** Rev. E. Nieting, Lutheran Church—**Dunrea:** Rev. Father R. Bertrand, Roman Catholic Church—**Whitewater:** Rev. Peter Harms, Mennonite Brethern—**Rosenort:** Rev. P. J. Reimer, Mennonite Brethern—**Ninette:** Rev. T. A. Payne, United Church—**Winnipeg:** Rev. Father R. Beaulieu, Roman Catholic Church.

Entertainment

Winnipeg: Pentecostal Band, Calvary Temple, Mr. H. Nunneleys Concert Party—**Brandon:** Canadian Legion Band; Brandon Musicians' Association; St. Paul's United Church Young People's Group—**Belmont:** Belmont Players.

Flowers

Belmont: The Sykes: Family—**Killarney:** Dr. J. Dickson—**Carman:** The Strachan Seed Company—**Brandon:** Patmore Florist—**Rounthwaite:** Rounthwaite Ladies' Aid—**Vancouver, B.C.:** Mrs. Shannon—**Ninette:** W. B. Stewart; Mr. and Mrs. Alex McDonald.

Other Gifts

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