

Contributors

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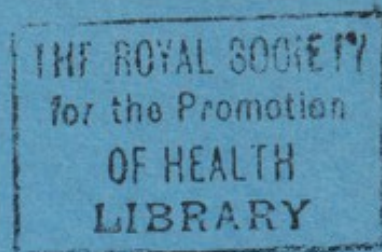
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PROVINCE OF MANITOBA

DEPARTMENT OF HEALTH

ANNUAL REPORT

FOR THE CALENDAR YEAR

1964

WINNIPEG, MANITOBA.

Printed by R. S. Evans — Queen's Printer for Province of Manitoba

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To His Honour,

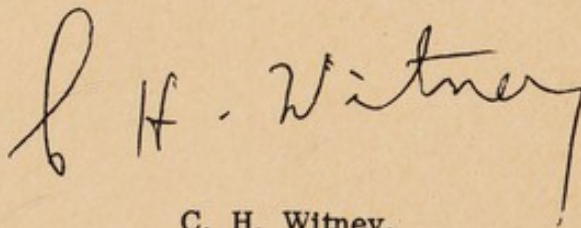
Errick F. Willis,

Lieutenant-Governor of the Province of Manitoba.

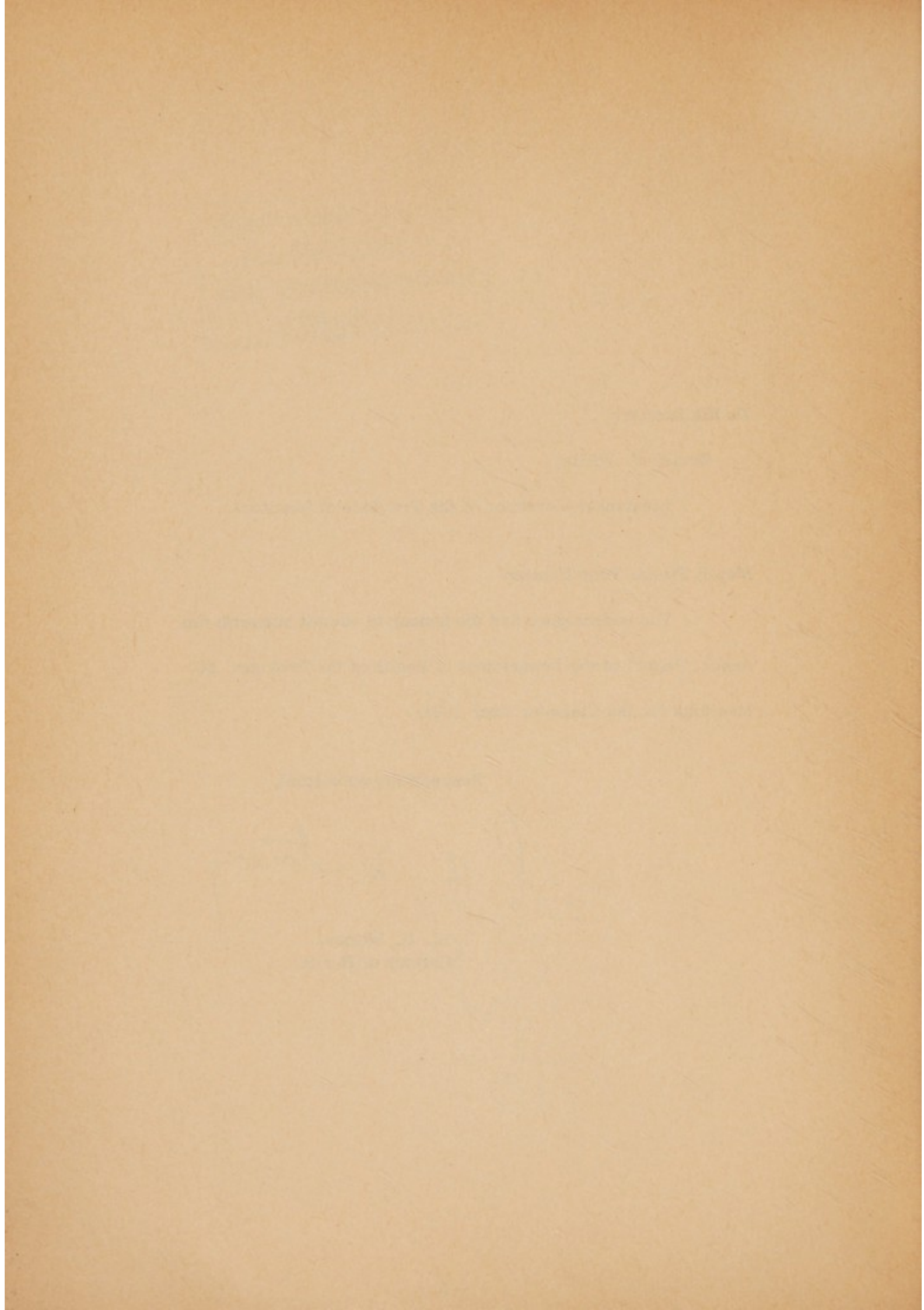
May It Please Your Honour:

The undersigned has the honour to submit herewith the
Annual Report of the Department of Health of the Province of
Manitoba for the Calendar Year 1964.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "C. H. Witney". The signature is fluid and cursive, with the first letter "C" being large and looping. The name "Witney" is written in a similar cursive style.

C. H. Witney,
Minister of Health.

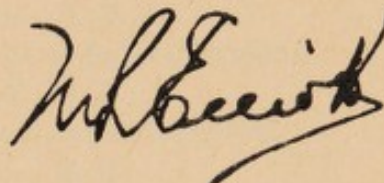


The Honourable C. H. Witney,
Minister of Health,

Sir:

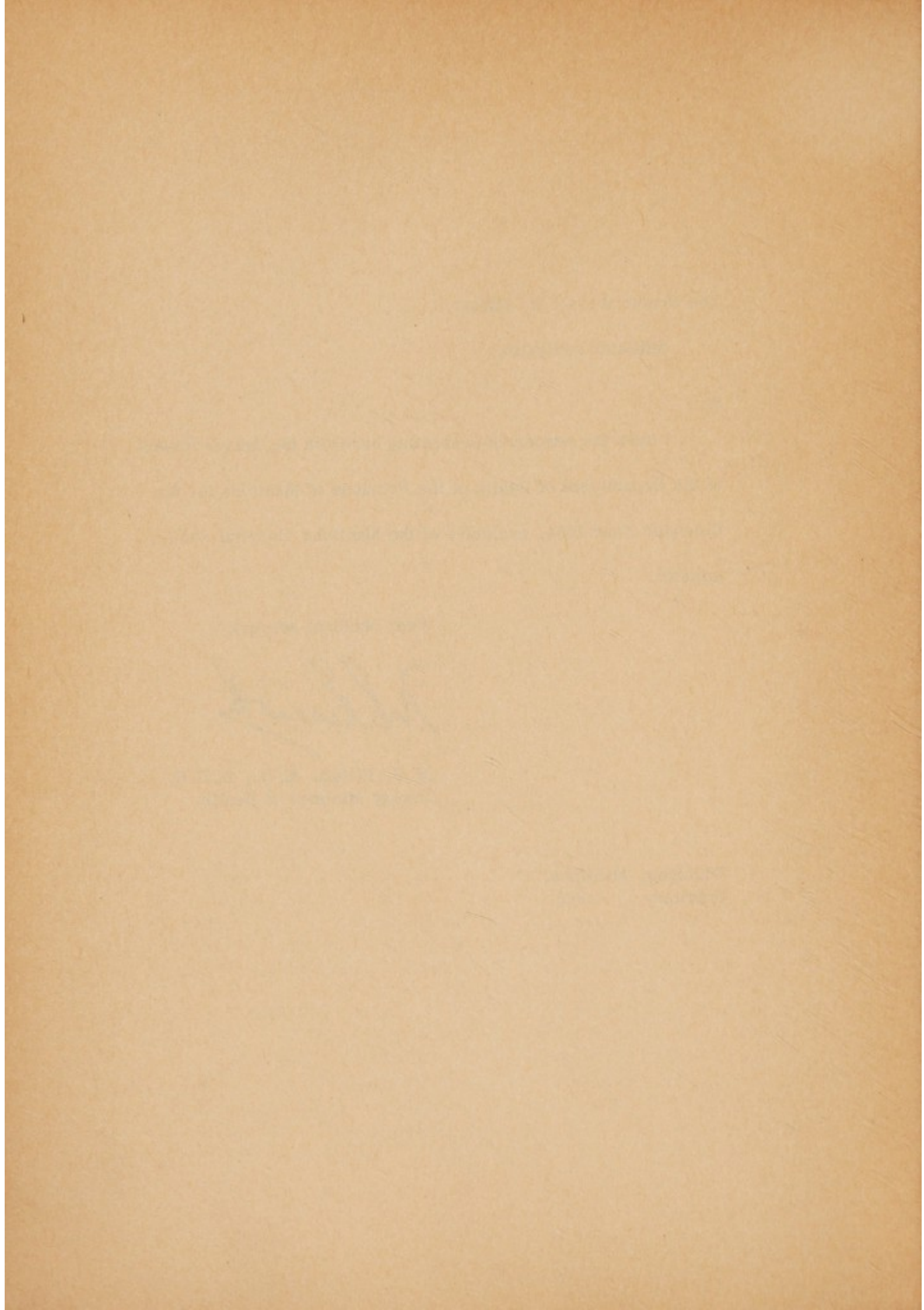
I have the honour of presenting herewith the Annual Report
of the Department of Health of the Province of Manitoba for the
Calendar Year 1964, exclusive of the Manitoba Hospital Com-
mission.

Your obedient servant,

A handwritten signature in dark ink, appearing to read 'M. R. Elliott', with a stylized flourish at the end.

M. R. Elliott, M. D., D. P. H.,
Deputy Minister of Health.

Winnipeg, Manitoba.
February 1965.



MANITOBA DEPARTMENT OF HEALTH
DIRECTORY OF DEPARTMENTAL OFFICERS

Minister
Honourable C. H. Witney

Deputy Minister of Health
M. R. Elliott, M. D., D. P. H.

GENERAL ADMINISTRATION

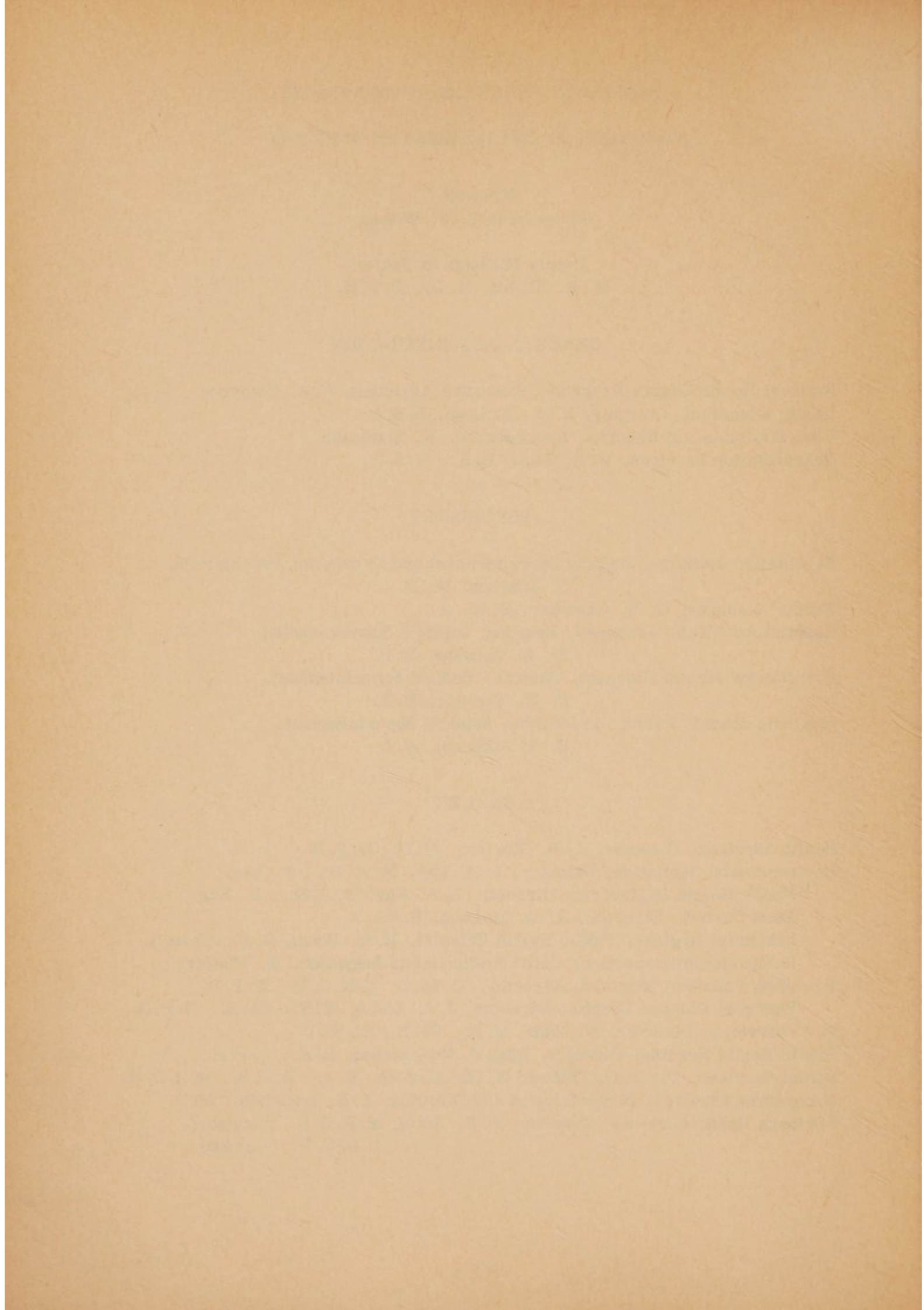
National Health Grants Program, Executive Assistant, C. A. Cameron
Health Education, Director, D. F. McLean, B. S. A.
Vital Statistics and Records, Recorder, D. W. Matheson
Rehabilitation Services, W. N. Boyd, B. A., M. S. W.

PSYCHIATRY

Psychiatric Institute, Medical Superintendent and Provincial Psychiatrist,
E. Johnson, M. D.
Farms' Manager, G. R. Chandler, B. Sc. A.
Hospital for Mental Diseases, Brandon, Medical Superintendent,
M. E. Bristow, M. D.
Hospital for Mental Diseases, Selkirk, Medical Superintendent,
R. H. Tavener, M. D.
Manitoba School, Portage la Prairie, Medical Superintendent,
H. S. Atkinson, M. D.

HEALTH

Health Services, Director, J. B. Morison, M. D., D. P. H.
Environmental Sanitation, Director, L. A. Kay, M. A. Sc., P. Eng.
Public Health Engineering Director, L. A. Kay, M. A. Sc., P. Eng.
Food Control, Director, A. G. McLeod, B. Sc. A.
Industrial Hygiene, Public Health Chemist, W. M. Ward, B. A. (Chem.)
Public Health Inspection, Chief Public Health Inspector, M. Flattery
Preventive Medical Services, Director, E. Snell, L. R. C. P., D. P. H.
Venereal Disease Control, Director, J. A. Eadie, M. B., Ch. B., D. P. H.
Care Services, Director, W. Watt, M. B., Ch. B., D. P. H.
Public Health Nursing, Director, Miss J. Williamson, R. N., D. P. H.
Dental Services, Director, Clifford H. McCormick, B. A., D. D. S., D. D. P. H.
Laboratory Services, Bacteriologist and Director, L. B. Lansdown, M. D.
Northern Health Services, Director, R. C. Rolfe, M. R. C. S., (England),
L. R. C. P. (London)



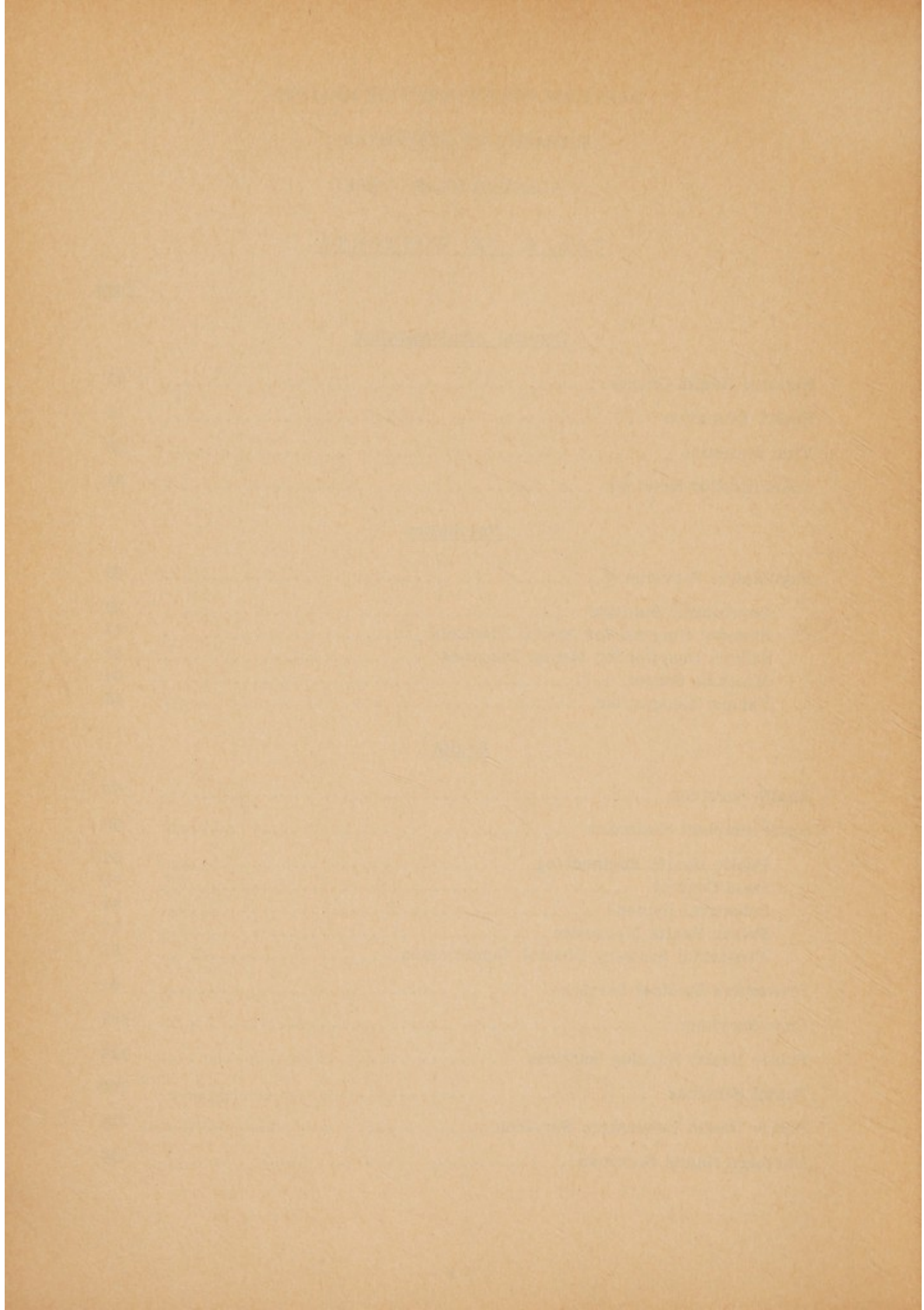
MANITOBA DEPARTMENT OF HEALTH

SUMMARY OF ACTIVITIES

CALENDAR YEAR - 1964

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GENERAL ADMINISTRATION

NATIONAL HEALTH GRANTS

This program is supported by a series of nine Federal grants-in-aid and was conceived as a means of assisting the provinces in the development, improvement and extension of their health services and to promote a working partnership between the Dominion and the Provinces for the advancement of health.

In six of the grants the federal government bears the entire cost of the service outlined in the project but it is required by the federal authorities that the provinces contribute an equal amount when projects are submitted under the Hospital Construction, Cancer Control, and Medical Rehabilitation and Crippled Children Grant. Exceptions to this "matching" requirement are allowed for the purchase of equipment or for the training of personnel.

In general, these grants contribute to the extension of local health services in both rural and urban areas; the training and employment of many categories of health workers; the expansion and renovation of existing hospital buildings and the erection of new ones; the control of tuberculosis, venereal and other communicable diseases; the development of improved cancer treatment and diagnostic facilities, of laboratories for the diagnosis of disease and of medical rehabilitation services to restore patients to the maximum degree of health and productivity; the treatment of crippling conditions in children; the extension of services to prevent and treat mental illness; the improvement of care given to mothers and their children; and the promotion of research in public health.

These grants are made on a fiscal year basis and the following table displays the actual payments made to Manitoba during the Federal Government's latest full fiscal period, ended on March 31, 1964:

<u>Grants</u>	<u>Amount</u>
Professional Training	\$ 87,368.18
Hospital Construction	957,815.66
Mental Health	435,222.97
Tuberculosis Control	178,353.11
Public Health Research	83,263.26
General Public Health	736,201.66
Cancer Control	163,382.00
Medical Rehabilitation and Crippled Children	158,903.65
Child and Maternal Health	64,613.37
	\$ 2,865,123.86

The following outline indicates briefly the use made of these funds:

Professional Training Grant: Intended primarily for the training of health and hospital personnel who would use their additional skills in salaried positions in provincial health departments, hospitals, health and diagnostic units, municipal health departments, and in certain non-governmental agencies acting on behalf of a province. This objective is achieved mainly through the granting of bursaries to individuals and the organization of short courses or institutes. Bursary assistance is also provided for trainees under the Mental Health and

General Public Health Grants and the following consolidated table displays the number of health and hospital personnel whose studies were financed through funds provided under all three Grants during the academic year 1963/64 and of those who are presently enrolled in 1964-65 courses:

<u>Trainees</u>	<u>Institutes</u>	<u>Short Courses</u>	<u>Correspondence Courses</u>	<u>Full Academic Year</u>	
				<u>Completed 1963/64</u>	<u>On Course 31/12/64</u>
Chemists		1			1
Dental Hygienists				3	5
Food and Milk Consultants		4			
Health Educators		1			
Hospital Administrators			4		1
Laboratory and X-Ray Technicians		2		38	53
Nurses	63			35	23
Occupational Therapists					1
Physicians: Medical Doctors				2	3
Psychiatrists		5		6	7
Physiotherapists				1	1
Psychologists	40			3	3
Psychiatric Social Workers				2	6
Public Health Inspectors	86			3	6
Public Health Engineers		3			
Speech and Hearing Therapists				6	4
Teachers of Handicapped Children				2	
	189	16	4	101	114

Funds were also provided to pay the salaries of two instructors for courses being conducted at the Central Laboratory in Winnipeg and the Regional Laboratory at Brandon, and for the expense involved in conducting institutes in the rural parts of the province. These institutes are concerned with maternal and child health and are well attended by professional people such as medical students, physicians, nurses, social workers and educationalists.

Hospital Construction Grant: Provided for the expansion and renovation of existing hospital buildings and the erection of new ones. Under the terms and conditions governing this Grant the province is obliged to make a contribution equal to that made by the Federal Government.

Grants Paid by Canada Between April 1 and December 15, 1964

<u>Recipient</u>	<u>Amount</u>
Bethel Hospital - Winkler	114,540.00
Bethseda Hospital - Steinbach	48,814.72
Manitoba Cancer Treatment and Research Foundation	11,175.00
Manitoba School for Mentally Defective Persons	31,628.42
McCreary Medical Nursing Unit	13,783.31
Northern Health Unit	3,894.58
Winnipeg General Hospital	192,426.66
	<u>\$ 416,262.69</u>

Grants Paid by Canada During Their Fiscal Year 1963/64

<u>Recipient</u>	<u>Amount</u>
Altona District Hospital	52,857.57
Bethseda Hospital - Steinbach	97,629.45
Brandon General Hospital	148,530.00
Children's Hospital - Winnipeg	3,761.94
Crowe Memorial Hospital - Eriksdale	48,563.38
Dauphin General Hospital	29,358.03
Elkhorn Medical Nursing Unit	6,714.70
Fox Memorial Hospital - Carberry	43,419.99
Gilbert Plains Medical Nursing Unit	44,416.81
King Edward Hospital - Winnipeg	10,807.64
Manitoba Cancer Treatment and Research Foundation	67,878.33
Manitoba School for Mentally Defective Persons	122,072.35
McCreary Medical Nursing Unit	11,357.69
Misericordia Hospital - Winnipeg	33,657.49
Northern Health Unit	9,208.75
Roblin District Hospital	8,924.15
St. Boniface Health Unit	23,226.67
St. James Health Unit	13,650.00
Selkirk Psychiatric Institute	141,150.00
Victoria General Hospital - Winnipeg	1,350.71
Winnipeg General Hospital	39,280.01
	\$ 957,815.66

Mental Health Grant: Used to promote those programs most likely to lead to improvement in treatment services provided for care of the mentally ill.

Assistance was provided for the following purposes:

(1) Employment of additional staff and the purchase of equipment and supplies for the following hospitals and clinics:

Psychiatric Institute, Winnipeg
 Manitoba School for Mentally Defective Persons, Portage la Prairie
 Child Guidance Clinic of Greater Winnipeg
 Brandon Hospital for Mental Diseases
 Selkirk Hospital for Mental Diseases, and
 Psychiatric Out-Patient Department at:
 St. Boniface Hospital,
 Children's Hospital, Winnipeg
 General Hospital, Winnipeg.

- (2) To assist in the post-graduate training of psychiatrists through payment of honoraria to visiting lecturers and the purchase of textbooks;
- (3) Training of psychiatrists, psychologists and psychiatric social workers;
- (4) Financing of four research studies in the field of mental health.

Tuberculosis Control Grant: Used in its entirety by the Sanatorium Board of Manitoba for:

- (1) Improvement and extension of the following program:
 - (a) Medical and surgical services and the training of under-graduate and licensed practical nurses at the Manitoba Sanatorium, Ninette;
 - (b) Rehabilitation services at the Manitoba Sanatorium at Ninette and the Central Tuberculosis Clinic, Winnipeg;
 - (c) B. C. G. vaccination;
 - (d) X-raying of the chests of patients admitted to general hospitals; and
 - (e) Tuberculin Surveys.
- (2) The purchase of streptomycin and other antibiotics.

Public Health Research Grant: Provided funds to allow investigators in the University of Manitoba, hospitals or the Health Department to conduct research into eleven public or community health problems.

General Public Health Grant: Used to strengthen and improve existing programs and to extend services in various fields which are not covered by specific grants. Funds were allotted for the following purposes:

- (1) Salaries of additional staff and the purchase of supplies, for the following Departmental Bureaus:
 - (a) Public Health Laboratory at Dauphin;
 - (b) Health Education
 - (c) Environmental Sanitation;
 - (d) Local Health Units.
- (2) Payment of one-half of the cost of the salaries of additional staff and the purchase of supplies, etc., for the following Departmental Bureaus:
 - (a) Venereal Disease Control;
 - (b) Laboratory and X-Ray Units.
- (3) Salaries and travelling expenses for additional staff for the City of Winnipeg Health Department;
- (4) Purchase of equipment for use in the homes of poliomyelitis patients who have been discharged from hospital;
- (5) Payment of one-half of the cost of our purchase of poliomyelitis vaccine;
- (6) Payment of staff salaries and the purchase of supplies, etc., to support the following programs:
 - (a) Glaucoma Clinic, Winnipeg General Hospital
 - (b) Poison Control Centre, Children's Hospital;
- (7) Payment of 50% of the cost of salaries, supplies and equipment required for the virus diagnostic services performed by the University of Manitoba's Department of Bacteriology and Immunology;
- (8) Training of Laboratory and X-Ray Technicians, Public Health Inspectors, Health Educators, Nursing Consultants and Dental Hygienists.

- (9) Payment of the following grants:
- (a) To the Canadian Public Health Association -- \$500.00
 - (b) To the Canadian Council on Hospital Accreditation -- \$1,525.00
- (10) Employment of Indian and Metis girls to serve as lay dispensers and to assist in a supervised Public Health Program among their own people in Northern Manitoba;
- (11) Purchase of equipment to provide a mobile clinic to bring dental services to communities not served by a resident dentist; and
- (12) To undertake a survey of existing occupational health facilities in Manitoba.

Cancer Control Grant: Cancer control was, in the year under review, vested with the Cancer Treatment and Research Foundation and the entire federal allotment of \$163,382.00 was used for their purposes. However, commencing with the fiscal year 1964/65 the operating costs of the Foundation became a responsibility of the Manitoba Hospital Commission with the costs being shareable between Canada and Manitoba under the Hospital Insurance and Diagnostic Services Act. As a result the Cancer Control Grant allotments will in future be transferred to other grants in which our allotments are insufficient to meet the demand placed upon them.

Medical Rehabilitation and Crippled Children Grant: Under the terms of this grant Manitoba is required to match dollar for dollar all contributions received from Canada. Our allotment from Canada was used for the following purposes:

- (1) To assist the Society for Crippled Children and Adults of Manitoba in furthering their program of development of better facilities for the rehabilitation of the physically handicapped;
- (2) To assist in meeting the operating budget, after deduction of fees paid by students, of the University of Manitoba's School of Medical Rehabilitation;
- (3) To assist the Canadian Arthritis and Rheumatism Society in meeting the costs of medical supervision, planning, and the development of mobile occupational and physiotherapy services in the rural parts of the Province;
- (4) To defray part of the costs of the Winnipeg General Hospital's Home-Care Program;
- (5) Training of specialists engaged in the habilitation of babies who are afflicted with congenital anomalies;
- (6) To assist parents in meeting the cost of advice and counselling from sources outside of Manitoba toward habilitation of their own children who have congenital malformations; and
- (7) To defray the cost of establishing and operating in the Rehabilitation Hospital a research and training centre related to the care of disabled persons.

Child and Maternal Health Grant: Provided funds for the following purposes:

- (1) Assistance in the organization of pre-natal classes through payment of stipends to the instructors and the purchase of equipment and teaching aids;
- (2) Maintenance of a registry of Winnipeg school children who have major handicapping conditions;
- (3) Employment of a director and three transfusion officers to provide a co-ordinated and uniform transfusion service to babies suffering from haemolytic diseases of the newborn;

- (4) Payment of the salaries and expenses of seven staff members of this Department who are engaged in preventive dentistry in rural Manitoba and the purchase of equipment and supplies used in their clinics; and
- (5) Financing the following research:
 - (a) A Study of intrauterine, natal and neonatal deaths; and
 - (b) The assessment of the value of procedures to detect the foetal Electrocardiograms during the second stage of labour; and
- (6) Study of maternal mortality in an effort to reduce maternal losses.

HEALTH EDUCATION

Drawing on a diverse range of resources within its section, Health Education develops programs in public health education and provides consulting services and educational materials to all other branches of the department and to allied agencies in the public health field. Also, through the distribution of press material and contact with publicity media, this section publishes information concerning departmental services and facilities available to the people of Manitoba.

At the beginning of the fiscal year, 1964 - 1965, services of Health Education were expanded to include administrative control of budget and some degree of program control, over Manitoba's Alcohol Education Services. This organization is non-governmental but sponsored almost entirely by a government grant. Their main function is to provide alcohol educational services to the community through lecturing and distribution of literature.

Also, Health Education was given the responsibility of carrying out an alcohol educational program through advertising, a function formerly carried out through a community group known as the Manitoba Committee on Alcohol Education. This group was disbanded at the beginning of the fiscal year. Responsibilities concerning this area deal with the production and placement of educational material in all publicity media on a regular basis. Material is designed to encourage people to use discretion when consuming alcoholic beverages, and to learn to recognize symptoms of alcoholism and become acquainted with sources of help for the alcoholic. Efforts are also made through advertising, to create a better understanding on the part of the public with respect to alcoholism and a greater insight into the problems of an alcoholic.

To coordinate all activities in the alcohol field including education and rehabilitation, a Coordinating Committee was set up comprised of a representative from each agency including Health Education.

Other major programs over the year in which Health Education became heavily involved included a province-wide Polio Immunization Campaign, Child Traffic Safety Education, School Health Curriculum Revision, Health Hazards and Smoking, Water Safety, Exhibit Production, general information and public relations, and production and revision of pamphlets, posters and other educational materials.

Polio Program Province-Wide

Working in close harmony with other sections of the department, Health Education contributed substantially to the success of the province-wide polio immunization campaign held in Manitoba in 1964.

Prior to, and during this campaign, all publicity requirements were met by Health Education. This involved the production and distribution of 10,000 posters, 500,000 leaflets, preparation of press releases and special articles, radio and T.V. spot announcements, and liaison work with respect to arranging twelve T.V. appearances of departmental personnel concerning the campaign.

Polio Immunization Program

Poster Production	10,000
Leaflet Production	500,000
Number Immunized	611,517

A total of 611,517 persons received Sabin Vaccine during this second mass polio immunization program in Manitoba. It is estimated that 45 per cent of pre-school children, 85 per cent of school children and 45 per cent of all adults over the age of 20 years have now received two doses of Sabin Vaccine.

Health Curriculum Under Revision

Revision work on the health curriculum in Manitoba schools, Grades I to IX inclusive, progressed over the year to the point where Grades I, II and III were completed in a provisional form and put into effect on a trial basis with a select group of teachers at the beginning of the 1964-1965 school term.

Following a summer recess, the Curriculum Revision Committee commenced work on Grades IV to IX inclusive, in the fall of 1964. To ease the heavy work load, to some extent, the Committee was increased in size to include all three health educators and additional representation from nursing and the teaching profession.

Objectives are to complete the revision to the end of Grade VI in 1965 and present the entire revised curriculum to the Department of Education for the school year 1966-1967.

Some of the materials prepared may be integrated with Science and Guidance while portions will probably be retained as a separate health unit on curriculum.

Elmer Safety Program Launched

The Elmer child safety school program (sponsored by the National Safety League), first introduced into Manitoba in 1963, is gaining wide acceptance, especially in the Metro-Winnipeg area.

All elementary schools in Winnipeg (70), St. James (15), East Kildonan (15) and St. Boniface (15), have accepted this program.

Also, efforts to introduce the program into large rural centres have resulted in the Town of Flin Flon accepting it in their ten elementary schools. Here, the local Lion's Club has taken a keen interest in child traffic safety and will sponsor the program and support the local R.C.M.P. in sustaining interest in this field.

Attention is now being focused on some other large centres such as Portage la Prairie, Brandon, Dauphin and Selkirk with respect to the Elmer program.

Experience indicates that this program is most effective when channeled through local police authorities and local service organizations.

The Elmer program is designed to teach children sound safety practices. To attract attention and sustain interest, a central cartoon character, "Elmer, The Safety Elephant", was developed and reproduced on all pennants and literature. All safety rules are considered as Elmer's rules and presented to

children as such.

Elmer Safety Program

Number of Schools Carrying Program	125
a. Winnipeg	70
b. St. James	15
c. East Kildonan	15
d. St. Boniface	15
e. Flin Flon	10
f. Transcona	12

Water Safety Group Formed

Represented on the Provincial Water Safety Committee, an advisory body to the Red Cross, Health Education assisted the water safety division of the Canadian Red Cross in program development and in promotion of programs and services offered in the water safety field. An even closer liaison is anticipated in this area in the future with further expansion of existing programs especially in rural areas and introduction of new programs such as drownproofing.

Exhibit Production

Manitoba's dynamic approach to treatment of the mentally ill was depicted in an exhibit developed for Provincial Fairs in 1964. This exhibit was displayed in the Red River Exhibition in Winnipeg, the Provincial Exhibition in Brandon, Portage Fair, Dauphin Fair and the Flin Flon Fair.

This production was designed to indicate the effectiveness of treatment today as compared with 25 years ago, and to further dispel the traditional stigma associated with mental illness.

Mental Health Exhibit Display

Exhibited at:

Red River Exhibition - Winnipeg
Provincial Exhibition - Brandon
Fair - Dauphin
Fair - Flin Flon
Fair - Portage la Prairie

Teachers Study Public Health

During a six-week period in the summer of 1964, 30 elementary school teachers attended the summer school workshop in public health, organized and administered by Health Education in cooperation with the Department of Education.

All aspects of public health were covered by specialists from the Manitoba Department of Health with emphasis on Health Education.

Teachers who successfully complete this summer session gain three credits toward a first class teaching certificate.

Smoking Program Under Consideration

A wide variety of literature on the hazards of smoking was compiled by the Federal Department of Health and distributed on request to all provinces. Health Education, on receipt of materials, assembled it into kit form and provided these in quantity to local health units throughout the Province and City Health in Winnipeg. Materials are being used to supplement local programs in smoking and health.

To further assist smoking educational programs in schools and community, the Manitoba Medical Association in cooperation with the Department of Health has set up a panel of physicians who are willing to fill speaking engagements on this subject on request.

Venereal Disease

Due to a rising incidence of Venereal Disease, the location and phone number of the Venereal Disease Clinic has been advertised through the distribution of booklets of matches and posters. Also, an electronic telephone answering device has been installed on the venereal disease clinic line which will provide information twenty-four hours a day.

Services Varied

Other areas of activity concerning Health Education included:

- promotion campaign for Alcoholism Prevention Week, October 12 - 18.
- promotion campaign concerning Pharmaceutical Week in Manitoba.
- Health Inspector Training Program.
- Health Inspector Workshop.
- Safety in co-operation with the Greater Winnipeg Safety Council.
- Steering Committee re planning of National Convention of Highway Safety Conference to be held in Winnipeg, the spring of 1965.
- Provision of Health Education sessions for Dental Technicians.

Information Services

Activities in the information area continued at a high level over the year, involving preparation of press material, liaison with all publicity media and association with many voluntary agencies and other departments in government.

These activities included:

- preparation of 12 issues of departmental newsletter;
- preparation of 131 press releases and 100 spot announcements on departmental operations;
- liaison with respect to 20 T. V. appearances and six radio interviews involving various specialists in the department;
- operation of comprehensive promotion campaign concerning the Polio Immunization program held in the spring of 1964.

Information Services

No. of Departmental Newsletters Prepared.....	12
No. of Press Releases Prepared.....	131
No. of Spot Announcements Prepared.....	100
No. of T. V. Appearances Arranged.....	20

Publications

Production and publication of new materials and revision of old material was given considerable attention this year covering such specific areas as Psychiatric Nursing, Rh Factor, First Aid, Pre-school Children, and Carbon Tetrachloride.

A major production involved the preparation of a comprehensive first aid flip chart for distribution through local health units, the Department of Labour and the Manitoba Rural Safety Association to schools, industry and rural points. An initial quantity of 5,000 were printed for distribution in 1965.

Distribution of pamphlets this year totalled 995,058 an increase of 225,400 over the same period in the previous year.

Poster circulation throughout the province totaled 38,731. These figures include posters and pamphlets distributed re Sabin Vaccine during the polio campaign.

Publications

No. of Publications Distributed	995,058
No. of Posters Distributed	38,731

Mimeographing Services

Mimeographing services provided by Health Education continue to be in constant demand by the Health, Welfare and some other departments. Printing jobs over the past year show an increase over 1963 of, 366 printing jobs, totalling 1,236 orders. This involved 3,871 stencils and 682,539 sheets of paper.

This section of our operation provides an extremely important service to all concerned.

Mimeographing Services

No. of Printing Orders	1,236
No. of Stencils Used	3,871
Total No. of Sheets of Paper Printed	682,534

Art Services

An increase in activities in publications and the television field have naturally placed greater demands on our Art Section. Over the past year, 192 major projects were completed.

Pamphlets	16
Certificates	9
Covers Designed	14
Logos	3
Posters Designed	17
Folders	3
Illustrations	103
Graphics T. V.	6
Letterhead Design	2
Annual Reports	4
Campaigns	3
Newspaper Ads	5
Label Design	3
Direct Mail	4

Films

Educational films on Health supplied to the community form an integral part of school and community educational programs. With the inception of the Health Education Section, demands for films have necessitated an annual increase in the size of the library until today some 950 films are available to the public. Rate of use has been relatively constant over the past two or three years, with 1964 statistics indicated on the following page.

January, 1964 - December, 1964

Number of Films Processed	5,785
Number of Bookings	3,441
Attendance	211,827

Field Health Educators

A definite move toward an expansion in size of area covered by field health educators was made over the past year in two of the three regions covered by health educators.

The Health Educator in the Selkirk Health Unit, has on request, provided certain services to central office and the Kildonan-St. Paul Health Unit.

The Health Educator based in the Neepawa Health Unit, has now established a routine whereby nearly 50 per cent of her time is spent in the Portage Health Unit area and a small percentage of time and effort is directed in the Brandon Health Unit area.

The Health Educator in the St. Boniface Health Unit, concentrates most of his activities within that unit area but does periodically devote some small portion of his time to central office problems and projects.

Activities of field health educators at Selkirk, St. Boniface and Neepawa include:

- consultation services to all local health unit staff members on education techniques and assistance with the organization of local programs;
- provision of resource material for health unit public health programs;
- revision, co-ordination and supervision of summer school health education workshop;
- liaison with general public and publicity media;
- participation in revision of school curricula concerning health.

Field Health Educators - (Including Selkirk, Neepawa and St. Boniface)

No. of Films Shown	156
Attendance	6,302
Number of News Releases	101
Instruction Courses:	
a. Number of Classes	46
b. Attendance	2,805
Pamphlets Distributed	16,036
Assistance to Teachers Including Consultation and Talks ...	71
Talks to Lay Groups	140
Attendance	3,346
Lectures to Professional Groups	14
Attendance	1,050
Signs and Posters Made	60

Nutrition Services

A general nutrition consultative service is provided by the nutritionist and major programs participated in included:

- Participated in the Health Education Summer School Workshop for Teachers through the presentation of lectures in nutrition relating to school health. Also lectured 125 students at Brandon Teachers College.

Continued coordination and guidance for 28 white rat experiments in city and rural schools. Also assisted several schools in conducting food habit surveys.

Two prenatal institutes for nurses were held over the past year. The courses are given to nurses as pre-requisite for conducting prenatal classes in health units. Lectures on nutrition were presented to each group. In addition, ten prenatal nutrition classes were given by the nutritionist in health units, on request. Assistance was also provided to nurses on the assessment of prenatal food records and preparation of nutrition teaching material.

Assisted health unit and departmental personnel with nutritional and dietary problems and provided consultative services to volunteer organizations. Work in the volunteer field included six lectures to home nursing classes for the Canadian Red Cross Society, three lectures to Streamliners groups, two lectures to dietetic internes at the Misericordia and Deer Lodge Hospitals, and two lectures to the Neighborhood Service Centre.

Assistance was given to the Department of Welfare with diets and budgets.

Assisted in setting up a proposed Dietetic Internship Course in Public Health Nutrition - two weeks duration - should be in effect by June, 1965.

Consultant nutritional advice given to the nutritionist with Care Services program. In many cases, this has involved a visit to the home in question. Also checked plans for proposed new senior citizens home.

The Junior Nutritionist position, formerly with this section, has been seconded to Care Services to carry out quality control inspections in nursing homes in the province.

Nutrition Services

Number of Rat Experiments	28
Lectures to Professional Groups	5
Lectures to Lay Groups	12
Attendance	449
Instruction Classes (prenatal classes, prenatal institutes workshops)	14
Attendance	234
Number of Food Habit Surveys Conducted	10
(Follow up assistance in three schools involving 168 students.)	

VITAL STATISTICS

The basic functions of the Division of Vital Statistics are:

- Primary: (1) to register and permanently preserve the records of births, stillbirths, deaths and marriages of the people of the Province of Manitoba;
- (2) to issue certificates of birth, death and marriage from the records;
- Secondary: (3) to tabulate, maintain and report the Vital Statistics data of the inhabitants of Manitoba;
- (4) to administer The Vital Statistics Act and The Marriage Act.

The Division receives weekly from the various 267 local and district registrars located throughout the Province, registrations of birth, stillbirth, death and marriage. These registrations are checked for accuracy, queried if necessary, individually numbered, coded and microfilmed, all under a system which is standard in all Canadian Provinces. A microfilm image of all original registrations is sent to the Dominion Bureau of Statistics in Ottawa for their tabulation and statistical use.

The Province of Manitoba has kept registrations of births, deaths and marriages since early in 1882 under governmental authority. This Division also maintains various Church records of baptisms, burials and marriages for different religious denominations dating back to 1812.

June 1964 Estimated Census Population Figures

White	930,000
* Indian	<u>28,000</u>
All	<u>958,000</u>

* Indian Population Figures Estimated from
Indian Affairs Branch, Winnipeg, as of January 1965.

Summary of Births, Stillbirths, Deaths, Marriages

There were registered during the year 1964: 22,070 live births, 344 stillbirths, 7,823 deaths and 6,797 marriages. Also recorded were 804 adoptions, 359 legal changes of name, 544 dissolutions of marriage, six marriage annulments, 864 delayed registrations of birth and 9,431 free verifications of vital events to various Governmental Departments and private agencies.

Births (excluding Stillbirths), Marriages and Deaths -
Manitoba, 1964 with Rates per 1,000 Population

	<u>1964</u>		<u>1963</u>		<u>1962</u>	
	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>	<u>Number</u>	<u>Rate</u>
<u>Live Births:</u>						
White	20,362	21.9	21,371	23.1	21,728	23.7
Indian	1,708	61.0	1,648	63.4	1,541	59.3
All	22,070	23.0	23,019	24.2	23,269	24.6
<u>Marriages:</u>						
White	6,686	7.2	6,581	7.1	6,240	6.8
Indian (on Reserves)	111	4.0	113	4.3	114	4.4
All	6,797	7.1	6,694	7.0	6,354	6.7
<u>Deaths:</u>						
White	7,550	8.1	7,661	8.3	7,249	7.9
Indian	273	9.8	308	11.8	284	10.9
All	7,823	8.2	7,969	8.4	7,533	8.0

Total Livebirths, Deaths and Stillbirths

	<u>1964</u>	<u>1963</u>	<u>1962</u>
<u>Live Births:</u>			
White	20,003	21,052	21,438
Metis	359	319	290
Non-Treaty Indian	301	273	250
Treaty Indian	1,407	1,375	1,291
All	22,070	23,019	23,269
<u>Deaths:</u>			
White	7,486	7,600	7,209
Metis	64	61	40
Non-Treaty Indian	25	37	38
Treaty Indian	248	271	246
All	7,823	7,969	7,533
<u>Stillbirths:</u>			
White	299	299	295
Metis	7	3	2
Non-Treaty Indian	5	9	5
Treaty Indian	33	30	29
All	344	341	331

Infant Mortality:

There were 570 infant deaths registered in 1964 giving an infant death rate of 26 per thousand live births.

Rates per 1,000 Live Births - Manitoba 1945-1964

1945	48	1950	35	1955	31	1960	30
1946	47	1951	33	1956	31	1961	25
1947	46	1952	31	1957	32	1962	26
1948	41	1953	35	1958	30	1963	25
1949	41	1954	29	1959	27	1964	26

1945-1962 - Dominion Bureau of Statistics figures.

1963-1964 - Vital Statistics final figures.

For purposes of statistical analysis, stillbirths are not included with live births, and therefore do not enter in the calculations of "Infant Mortality".

Maternal Mortality:

There were four maternal deaths registered in 1964 giving a maternal death rate of 0.2 per thousand live births.

Causes of Maternal Deaths - Manitoba 1964

	White and Metis	Indian	All
Toxaemias of pregnancy (642)	-	1	1
Delivery with specified complications (670-678)	2	-	2
Complications of the puerperium (680-689)	-	1	1
Totals	2	2	4
Number per 1,000 Live Births	0.1	1.2	0.2

Maternal wastage is usually measured by the ratio of deaths from puerperal causes to every 1,000 children born alive each year. The maternal death rate in Manitoba for the year 1964 is 0.2.

Ten Leading Causes of Death

<u>Cause</u>	<u>Number</u>	<u>Rate</u>
1. Heart Disease	2,554	266.6
2. Cancer (Malignant Neoplasms)	1,423	148.5
3. Vascular Lesions affecting central nervous system	840	87.7
4. Accidents	508	53.0
5. Pneumonias	409	42.7
6. Hypertensive Disease	142	14.8
7. Arteriosclerotic	131	13.7
8. Birth injuries, postnatal asphyxia and atelectasis	123	12.8
9. Congenital malformations	122	12.7
10. Suicides	96	10.0

Deaths in Manitoba by Age, Sex and Race
(The total of each group compared with 1963 and 1962)

	<u>White</u>		<u>Indian</u>		<u>All</u>	<u>All</u>	<u>All</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>1964</u>	<u>1963</u>	<u>1962</u>
Under 1 Year	251	215	58	46	570	579	617
1 - 4 Years	35	43	11	9	98	113	110
5 - 14 Years	39	21	8	7	75	79	84
15 - 24 Years	97	29	12	6	144	143	127
25 - 44 Years	233	134	11	7	385	379	379
45 - 64 Years	1,056	527	20	16	1,619	1,484	1,447
65 - 79 Years	1,682	1,143	22	16	2,863	3,015	2,763
80 Years and Over	1,112	932	7	17	2,068	2,176	2,005
Not Stated	1	-	-	-	1	1	1
Totals	4,506	3,044	149	124	7,823	7,969	7,533

Deaths of Children Under One Year of Age
By Cause and Age - Manitoba 1964

	<u>Under</u>	<u>7 - 28</u>	<u>Over 28 Days</u>	<u>Under</u>
	<u>7 Days</u>	<u>Days</u>	<u>to 1 Yr.</u>	<u>1 Yr.</u>
<u>White:</u>				
Lower respiratory	10	10	36	56
Immaturity	66	1	1	68
Congenital malformations	36	15	31	82
Birth injuries	70	2	-	72
Asphyxia and atelectasis	32	4	6	42
Gastro-intestinal	-	-	7	7
Ill-defined	57	2	1	60
Other	26	9	44	79
Totals	297	43	126	466
<u>Indian:</u>				
Lower respiratory	2	5	32	39
Immaturity	7	-	-	7
Congenital malformations	3	4	3	10
Birth injuries	4	-	-	4
Asphyxia and atelectasis	5	-	-	5
Gastro-intestinal	-	1	8	9
Ill-defined	2	1	3	6
Other	-	1	23	24
Totals	23	12	69	104
White and Indian Totals	320	55	195	570

ABBREVIATED LIST OF FIFTY CAUSES

Number of deaths and rates per 100,000 population - Manitoba 1964 White and Indian

Cause Groups	White Including Metis		Indian		Totals	
	Number	Rate	Number	Rate	Number	Rate
All Tuberculosis	(25)	(2.7)	(9)	(32.1)	(34)	(3.5)
Tuberculosis of respiratory system	21	2.3	6	21.4	27	2.8
Tuberculosis, other forms	4	0.4	3	10.7	7	0.7
Syphilis and its' sequelae	3	0.3	-	-	3	0.3
Typhoid fever	-	-	-	-	-	-
Cholera	-	-	-	-	-	-
Dysentery, all forms	2	0.2	-	-	2	0.2
Scarlet fever and streptococcal sore throat	-	-	-	-	-	-
Diphtheria	2	0.2	-	-	2	0.2
Whooping cough	1	0.1	1	3.6	2	0.2
Meningococcal infections	2	0.2	-	-	2	0.2
Plague	-	-	-	-	-	-
Acute poliomyelitis	-	-	-	-	-	-
Smallpox	-	-	-	-	-	-
Measles	-	-	6	21.4	6	0.6
Typhus and other rickettsial diseases	-	-	-	-	-	-
Malaria	-	-	-	-	-	-
All other diseases classified as infective and parasitic	14	1.5	6	21.4	20	2.1
Malignant neoplasms, including neoplasms of lymphatic and haematopoietic tissues	1,403	150.9	20	71.4	1,423	148.5
Cancer, excluding Hodgkins Disease, leukaemia and aleukaemia	(1,302)	(140.0)	(17)	(60.7)	(1,319)	(137.7)
Hodgkins Disease	(19)	(2.0)	-	-	(19)	(2.0)
Leukaemia and aleukaemia	(82)	(8.8)	(3)	(10.7)	(85)	(8.9)
Benign and unspecified neoplasms	19	2.0	2	7.1	21	2.2
Diabetes Mellitus	87	9.4	1	3.6	88	9.2
Anaemias	13	1.4	1	3.6	14	1.5
Vascular lesions affecting central nervous system	832	89.5	8	28.6	840	87.7
Nonmeningococcal meningitis	6	0.6	3	10.7	9	0.9
Rheumatic fever	4	0.4	-	-	4	0.4
Chronic rheumatic heart disease	73	7.8	1	3.6	74	7.7

ABBREVIATED LIST OF FIFTY CAUSES

Number of deaths and rates per 100,000 population - Manitoba 1964 White and Indian

Cause Groups	White Including Metis		Indian		Totals	
	Number	Rate	Number	Rate	Number	Rate
Arteriosclerotic and degenerative heart disease	2,404	258.5	21	75.0	2,425	253.1
Other diseases of the heart	124	13.3	5	17.9	129	13.5
Hypertension with heart disease	105	11.3	2	7.1	107	11.2
Hypertension without mention of heart disease	33	3.5	2	7.1	35	3.7
Arteriosclerosis	(130)	(14.0)	(1)	(3.6)	(131)	(13.7)
Influenza	6	-	-	-	6	0.6
Pneumonia	333	35.8	52	185.7	385	40.2
Bronchitis	56	6.0	2	7.1	58	6.1
Ulcer of stomach and duodenum	56	6.0	2	7.1	58	6.1
Appendicitis	7	0.8	-	-	7	0.7
Intestinal obstruction and hernia	51	5.5	3	10.7	54	5.6
Gastritis, duodenitis, enteritis and colitis except diarrhoea of the newborn	51	5.5	10	35.7	61	6.4
Cirrhosis of liver	51	5.5	-	-	51	5.3
Nephritis and nephrosis	40	4.3	4	14.3	44	4.6
Hyperplasia of prostate	27	2.9	-	-	27	-
Complications of pregnancy, childbirth and the puerperium	2	0.2	2	7.1	4	0.4
Congenital malformations	109	11.7	13	46.4	122	12.7
Birth injuries, postnatal asphyxia and atelectasis	114	12.3	9	32.1	123	12.8
Infections of the newborn	19	2.0	8	28.6	27	2.8
Other diseases peculiar to early infancy and immaturity unqualified	147	15.8	14	50.0	161	16.8
Senility without mention of psychosis, ill-defined and unknown causes	15	1.6	9	32.1	24	2.5
All other diseases	731	78.6	19	67.9	750	78.3
Motor vehicle accidents	194	20.9	11	39.3	205	21.4
All other accidents	281	30.2	22	78.6	303	31.6
Suicide and self-inflicted injury	95	10.2	1	3.6	96	10.0
Homicides and operations of war	13	1.4	4	14.3	17	1.8
Fractures, head injuries and internal injuries	354	38.1	18	64.3	372	38.8
Burns	21	2.3	7	25.0	28	2.9
Effects of poisons	67	7.2	2	7.1	69	7.2
All other injuries	140	15.1	11	39.3	151	15.8

Deaths Due to Diseases of the Circulatory System
Manitoba - 1964

<u>White:</u>	<u>Under 45</u>	<u>45-64</u>	<u>65-79</u>	<u>80 & Over</u>	<u>Male</u>	<u>Female</u>	<u>All</u>
Rheumatic fever	2	1	1	-	3	1	4
Chronic rheumatic heart disease	8	32	26	7	31	42	73
Arteriosclerotic and degenerative heart disease	50	577	1,089	688	1,538	866	2,404
Other diseases of heart	6	12	43	63	70	54	124
Hypertensive diseases	-	22	62	54	61	77	138
Diseases of arteries	7	16	59	121	114	89	203
Diseases of veins and other diseases of circulatory system	2	12	48	29	55	36	91
<u>Associated Conditions:</u>	<u>35</u>	<u>121</u>	<u>402</u>	<u>384</u>	<u>456</u>	<u>486</u>	<u>942</u>
Vascular lesions affecting central nervous system	19	98	351	364	408	424	832
Chronic nephritis	12	6	2	3	13	10	23
Diabetes Mellitus	4	17	49	17	35	52	87
Totals	110	793	1,730	1,346	2,328	1,651	3,979
<u>Indian:</u>							
Chronic rheumatic heart disease	-	1	-	-	1	-	1
Arteriosclerotic and degenerative heart disease	-	4	8	9	10	11	21
Other diseases of heart	2	-	3	-	1	4	5
Hypertensive diseases	-	2	2	-	1	3	4
Diseases of arteries	1	-	-	1	1	1	2
<u>Associated Conditions:</u>	<u>3</u>	<u>1</u>	<u>5</u>	<u>3</u>	<u>4</u>	<u>8</u>	<u>12</u>
Vascular lesions affecting central nervous system	1	-	4	3	3	5	8
Chronic nephritis	1	1	1	-	1	2	3
Diabetes Mellitus	1	-	-	-	-	1	1
	6	8	18	13	18	27	45
White and Indian Totals	116	801	1,748	1,359	2,346	1,678	4,024

Deaths Due to Malignant Neoplasms Showing Main Sites
Manitoba - 1964

	Under 45	45- 64	65 & Over	Male	Female	All
Buccal cavity and pharynx	-	9	14	11	12	23
Digestive organs and peritoneum	20	134	338	289	203	492
Respiratory system	11	80	132	191	32	223
Breast	13	52	48	-	113	113
Uterus	8	20	28	-	56	56
Female genital organs	2	36	25	-	63	63
Male genital organs	2	12	82	96	-	96
Urinary organs	-	25	60	62	23	85
Skin	3	3	11	7	10	17
Brain	15	22	8	29	16	45
Others	6	16	35	37	20	57
Neoplasms of lymphatic and haemato- poietic tissue	36	45	72	86	67	153
Totals	116	454	853	808	615	1,423

Deaths from Malignant Neoplasms According to
Area of Residence - Manitoba, 1964

	Male	Female	All
Brandon C.	28	21	49
Portage la Prairie C.	8	10	18
St. Boniface C.	31	23	54
Winnipeg C.	289	221	510
St. James C.	26	22	48
East Kildonan C.	23	21	44
West Kildonan C.	21	16	37
St. Vital C.	15	12	27
Transcona C.	10	4	14
Towns and Villages (1,000 + population)	85	66	151
Urban Municipalities	6	8	14
Rural Municipalities	200	152	352
Local Government Districts	22	12	34
Unorganized Territory	5	3	8
Indian Reserves	9	7	16
Outside Manitoba	30	17	47
Totals	808	615	1,423

Deaths from Tuberculosis By Age, Sex and Type
Among White, Metis and Indian - Manitoba, 1964

	<u>Under 25</u>		<u>25 - 64</u>		<u>65</u>	<u>Over</u>	<u>All</u>
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
<u>White:</u>							
Respiratory	1	-	5	3	10	2	21
Other	-	-	1	-	3	-	4
<u>Indian:</u>							
Respiratory	-	-	2	3	-	1	6
Other	-	1	1	-	-	1	3
Totals	1	1	9	6	13	4	34

Deaths from Tuberculosis According To
Area of Residence - Manitoba, 1964

	<u>Male</u>	<u>Female</u>	<u>All</u>
Winnipeg C.	11	3	14
East Kildonan C.	1	1	2
Towns and Villages (1,000 + population)	1	1	2
Rural Municipalities	5	1	6
Local Government Districts	1	1	2
Indian Reserves	2	4	6
Outside Manitoba	2	-	2
Totals	23	11	34

Number of Deaths Due to Motor Vehicle Accidents
And Other Accidents - Manitoba 1955-1964

<u>Year</u>	<u>Motor Vehicle</u> <u>Accidents</u>	<u>Other</u> <u>Accidents</u>	<u>Total</u> <u>Accidents</u>
1955	108	294	402
1956	159	266	425
1957	163	301	464
1958	132	267	399
1959	153	271	424
1960	142	269	411
1961	160	289	449
1962	161	281	442
1963	177	273	450
1964	205	303	508

1955-1962 - Dominion Bureau of Statistics figures
1963-1964 - Vital Statistics final figures

REHABILITATION SERVICES

This section of the Department of Health is responsible for making available to all physically and mentally disabled children and adults of Manitoba, the services they require to attain their fullest physical, mental, social, educational and occupational usefulness of which they are capable within the limitations of their handicaps. These services include: -

- (a) Medical restoration including any medical, surgical or psychiatric procedures necessary to eliminate or reduce the handicapping condition.
- (b) Provision of prosthetic appliances such as braces, crutches, artificial limbs etc., including training in the use of same.
- (c) Counselling, academic training, vocational testing, pre-vocational education, vocational training, job placement and follow-up.

Rehabilitation Services has two major functions namely: -

- I - The co-ordination of all government and voluntary agency resources providing services to physically and mentally handicapped persons. This is generally referred to as "co-ordination at the administrative level". The objective is to evaluate existing resources and to develop close working arrangements between these various resources in order to eliminate duplication and insure the most effective use of existing services and facilities.
- II - The provision of an organized comprehensive rehabilitation service to all handicapped persons.

Rehabilitation of The Physically Handicapped

Five voluntary agencies are responsible for developing a counselling relationship with the disabled person and assisting him in utilizing all community resources for purposes of medical, social, vocational and occupational assessment. This is followed by the development of a rehabilitation objective related to the capabilities of the individual concerned and then assisting the individual in utilizing necessary services for achievement of the determined objective. The five agencies are: -

- (a) Canadian National Institute for the Blind - responsible for blind persons and those with visual defects who are in danger of becoming blind unless properly treated. This agency is financed through Community Chest funds, a provincial grant and assistance from the Lion's Club.
- (b) Workmen's Compensation Board - responsible for adults disabled through industrial accidents. The Board's program is financed by contributions from Industry.
- (c) Sanatorium Board of Manitoba - responsible for children and adults disabled by tuberculosis. This agency is financed by federal-provincial funds and the annual Christmas Seal campaign.
- (d) Indian Rehabilitation Program - responsible for Treaty Indian children and adults with any type of physical disability. The program is financed entirely by the Government of Canada through the Department of Citizenship and Immigration with the exception of vocational training

costs which are met under the Technical Vocational Training Assistance Agreement. This program is administered on behalf of the Government of Canada by the Sanatorium Board of Manitoba. It was established under a separate agency because of the special attention that needs to be given to the cultural handicap of this group.

- (e) Society for Crippled Children and Adults of Manitoba - responsible for all physically disabled children and adults that do not come within the scope of the aforementioned agencies. This is the largest agency of the five with an active annual case load of over 2800. This agency is financed by a large federal-provincial grant, the annual Easter Seal and March of Dimes campaigns. Their 1964 budget amounted to approximately \$1,000,000 of which approximately 50% was provided through Rehabilitation Services. This agency also provides special services to the other four agencies such as psychological assessment and the services of the Industrial Workshop.

With the exception of the Workmen's Compensation Board program, one would normally find these rehabilitation services provided directly through a government department. In Manitoba, it has been found that the delegation of this responsibility to well established voluntary agencies has proven to be a decided asset. It has permitted greater flexibility in program development and has also involved the participation of many leading community citizens.

It should be noted that these five agencies do not by themselves provide all of the services required by the particular disability group for whom they are responsible. Rather, it is their duty to co-ordinate all existing community resources on behalf of the particular group for whom they are responsible. It should also be noted that many of the required services are available to disabled persons as they are to the general population without cost. The costs are met in a variety of ways. In many instances the disabled person has financial resources to meet the cost of services. In other instances the individual may be able to meet part of the cost. In still others he may be a recipient of provincial or municipal welfare and certain costs will be met by this source.

If none of these resources are available to meet the necessary cost of services, the rehabilitation agency concerned has funds to cover these costs. In no instance need a physically disabled person in Manitoba go without service because of inability to pay. Through existing agencies and programs in the rehabilitation field, over 3500 children and adults were provided with service in 1964. They were assisted in obtaining services ranging from a single counselling session to comprehensive medical treatment, provision of prosthetic appliances, vocational training and job placement.

An analysis of 300 adult cases placed into competitive employment during the year clearly indicates the economic benefits of rehabilitation.

Estimated annual earnings	\$ 600,000
Estimated annual payment to income tax	35,000
Cost of service for the 300 cases	120,000
Estimated annual provincial and welfare savings	75,000

Also, many hundreds of disabled persons were rehabilitated to sheltered employment in the community, in sheltered workshops, homebound employment and self care. In addition, many disabled children have been helped to take the maximum advantage of available educational services to equip them for happy

and useful lives in their community when they reach adulthood.

Rehabilitation of Mentally Ill

The vocational rehabilitation of the mentally ill is a direct responsibility of the Rehabilitation Services Division. One full time vocational rehabilitation counsellor works in close co-operation with the mental hospitals, private psychiatrists and community agencies.

During the past year over 150 mentally ill persons have been accepted for vocational rehabilitation services.

Effective use has been made of the Selkirk Vocational Centre which is now known as Skills Unlimited (Selkirk). This Centre is designed to provide a three-week work assessment and a six-month work training period to selected candidates from the Selkirk Hospital for Mental Diseases.

As a direct result of this facility, ten patients have been moved into full-time competitive employment. These ten patients have spent from five to fifteen years in the Selkirk Hospital for Mental Diseases. In addition the Centre has been a major factor in facilitating the discharge of a large number of mentally ill persons to the community, many of whom are capable of engaging in employment under sheltered conditions.

The success of the Selkirk Workshop stimulated the establishment of a second facility for the mentally ill in Winnipeg. This is known as Skills Unlimited (Winnipeg). It is designed to handle up to 75 patients per day in work assessment, work training or remunerative sheltered employment. This new facility was opened on July 1, 1964 with a grant of \$15,000 from the Department of Health. Since that time twelve persons have been rehabilitated to full-time competitive employment.

Both Selkirk and Winnipeg workshops obtain sub-contracts from Winnipeg industry. The support of Winnipeg industry has been most gratifying and indications are that even greater participation will be forthcoming.

During the past year, the Director has held several meetings with Officials of the Brandon Hospital for Mental Diseases and interested Brandon businessmen relative to the need for a sheltered workshop in Brandon. A Provisional Board has been established composed of ten businessmen and they are exploring this matter in detail. This group has suggested that a workshop be established in Brandon to provide work assessment, work training and remunerative sheltered employment to all types of handicapped conditions including the mentally ill.

A Rehabilitation Team has been established at the Selkirk Hospital for Mental Diseases which includes representation from the Hospital, a vocational rehabilitation counsellor from the Rehabilitation Services Division and a special service officer from the National Employment Service. This team approach which is an essential facet of vocational rehabilitation will considerably improve the service to psychiatric patients.

To handle referrals from other than the mental hospitals, a community team will be established shortly, composed of a vocational rehabilitation counsellor, a representative from the National Employment Service and a part-time psychiatric consultant.

Assistance to the Mentally Retarded

On April 1st 1964, the vocational rehabilitation of the mentally retarded became a direct responsibility of the Rehabilitation Services Division. Since 1945, the vocational rehabilitation of the mentally retarded was restricted to

female and male candidates from the Manitoba School for Mental Defectives at Portage la Prairie who were considered capable of engaging in selected employment in the Winnipeg community. The tremendous success with this group stimulated the establishment of a new expanded program which continues to accept referrals from the Manitoba School and also handles referrals from the community at large. The program is financed jointly by federal and provincial government funds under the Vocational Rehabilitation of Disabled Persons' Agreement.

The primary objective of this new service is to assist selected mentally retarded adults toward a substantially gainful occupation in competitive or sheltered employment in the community. The program does not by itself provide all of the services required by the mentally retarded persons but rather co-ordinates all existing government and voluntary agency resources on behalf of these individuals.

Success with the selected group from the Manitoba School for Mental Defectives can be attributed directly to the excellent social and occupational training provided by the school.

There is a very close working relationship between this program and the Manitoba Association for Retarded Children. This voluntary organization operates special classes for over 600 trainable retarded children, a work adjustment centre for over 50 adults in the Winnipeg community and a diversional activity centre for another 50 adults from the Winnipeg community. They are now giving consideration to the establishment of similar work adjustment and diversional activity centres in other parts of the province. This association also operates an excellent summer camp each year for a large number of mentally retarded persons.

Vocational Rehabilitation Program for the Mentally Retarded

		<u>1964</u>	<u>1963</u>
Total number in Care	- men	128	23
	women	<u>70</u>	<u>23</u>
		<u>198</u>	<u>46</u>
New Admissions	- men	122	11
	women	<u>59</u>	<u>6</u>
		<u>181</u>	<u>17</u>
Total Number of Employers	- men	39	22
	women	<u>25</u>	<u>17</u>
		<u>64</u>	<u>39</u>
Total Number of Foster Homes Used	- men	26	22
	women	<u>13</u>	<u>7</u>
		<u>39</u>	<u>29</u>

As at December 31, 1964, there were 92 persons in full employment.

Rehabilitation of the Alcoholic

During the past year, programs of the Alcoholism Foundation of Manitoba and the Salvation Army Harbour Light Centre have demonstrated their effectiveness in assisting many alcoholics towards useful and independent lives in their community. Further expansion of these programs is now underway.

PSYCHIATRY

PSYCHIATRIC SERVICES

Psychiatric services are designed to:

- prevent mental illness
- assist those suffering from mental illness
- assist those who have required hospital treatment to return to a normal way of life in the community.

Services are centered in three hospitals for mental diseases and one school for mentally defective persons.

Institutions include:

1. The Brandon Hospital for Mental Diseases
2. The Selkirk Hospital for Mental Diseases
3. The Psychiatric Institute in Winnipeg (56 beds)
4. The Manitoba School for Mentally Defective Persons

To supplement these facilities, there are four General Hospitals in Winnipeg with approximately 140 psychiatric beds and the 135 bed St. Amant Ward in St. Boniface for mentally defective children up to six years of age.

Out-Patient Departments for adults are operated by the two hospitals for mental diseases, the Psychiatric Institute and three of the four general hospitals.

Community mental health clinics which provide diagnostic and treatment facilities for designated geographic areas are operated out of the two hospitals for mental diseases. These clinics uncover cases of mental illness in the early stages when they can be treated effectively.

OBJECTIVES

The year 1964 has shown a continuation of a trend in psychiatric services which has been in evidence for 15 years. This trend is an accelerating increase in demands for all available types of psychiatric service. In more recent years there has become evident in this trend, a change in emphasis on type of service demanded. This change is shown in the rapidly increasing demand for help at the community level and a relative decrease in the demand for service for hospital patients.

The open-door policy which was being emphasized in the mental hospital ten years ago has now led to the extension of community-based services providing for many more patients in the home situation rather than in the in-hospital setting. This community emphasis is partly made up of the continuing treatment of the former hospital patient in his community environment. This is in recognition of the very significant importance of the "follow-up" service for patients who have at some time required in-hospital treatment. However, those persons in the community who suffer from lesser degrees of mental symptoms, but who, nevertheless have discomfort sufficient to interfere with application of themselves to their work and adaptation to society, are recognizing in rapidly increasing numbers that their symptoms can be lessened and adjustment increased by psychiatric advice and treatment on an out-patient basis.

There is also a similar increase in demand for community services for children, adolescents and adults who suffer from varying degrees of mental

retardation. Parents are realizing to an increasing degree, that the retarded child can be helped at various levels, that he can be trained within the home, or with short-term institutional care, to adopt improved habits of socialization, and that definite progress can be achieved in the schools for trainable retardates. From this appreciation there results increasing pressures for adequate facilities and trained personnel to provide these services.

A third area of psychiatric need which is becoming more pressing is facilities for assessment and treatment of the emotionally disturbed child, especially for those children whose symptoms are so severe they cannot be coped with except in a hospital setting which has provisions for both short-term and long-term care, treatment and supervision.

ACHIEVEMENTS

All reports from the various departments of the Psychiatric Service show a very considerable increase in services provided during the year.

The in-patient services of three mental institutions experienced an increase of admissions and discharges over the prior year, an experience which has been in evidence since 1958.

	<u>Patient Population</u>						
	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>	<u>1960</u>	<u>1959</u>	<u>1958</u>
Patient Population	2433	2613	2779	2935	3112	3189	3222
Decrease in Patient Population	180	166	156	177	77	33	

Total Decrease in Patient Population since 1958 ----- 789.

	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Total Previous Year</u>
On Register December 31, 1963	1400	1213	2613	2779
On Parole or Otherwise Absent	131	141	272	241
Remaining in Hospitals December 31, 1963	1269	1072	2341	2538
<u>Admissions:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Winnipeg Psychiatric Institute	499	476	975	
Brandon Mental Hospital	296	276	572	
Selkirk Mental Hospital	<u>317</u>	<u>320</u>	<u>637</u>	
Total	<u>1112</u>	<u>1072</u>	<u>2184</u>	
Less Transfers between Hospitals	153	130	383	
Total Direct Admissions	959	942	1901	1679
Total Under Treatment	2359	2155	4514	4458

							Total Previous Year
<u>Separations:</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>	
Discharges - exclusive of Transfers from Winnipeg Psychiatric Institute							
Winnipeg Psychiatric Institute	356	344	700				
Brandon Mental Hospital	278	280	558				
Selkirk Mental Hospital	325	331	656				
Total Discharges				959	955	1914	1675
Deaths				<u>98</u>	<u>72</u>	<u>170</u>	<u>219</u>
Total Separations				<u>1057</u>	<u>1027</u>	<u>2084</u>	<u>1894</u>
Remaining in Hospitals December 31, 1964				1192	1036	2228	2341
On Parole or Otherwise Absent				<u>114</u>	<u>91</u>	<u>205</u>	<u>272</u>
Total on Registers December 31, 1964				<u>2306</u>	<u>2127</u>	<u>2433</u>	<u>2613</u>

Statistics show a ten percent increase in patients under treatment due to a proportionate increase in admissions. Discharges from these hospitals has continued to surpass total admissions resulting in another decrease in total patient population in mental hospitals. The decrease in 1964 was 180 patients, the total decrease in patient population since 1958 has been 789 - from 3,222 patients in 1958 to 2,433 patients in 1964.

The St. Amant Ward of the St. Boniface Sanatorium continued to function at its full capacity of 134. No extension of facilities were provided but services of a qualified pediatrician to ensure full-time medical care were obtained. Plans are now underway to increase this capacity to 175 in 1965 and by 1968 to operate the whole sanatorium as a centre for care, treatment and training of the grossly retarded child in the younger age groups and the care and treatment of all retardates with physical handicaps requiring in-hospital nursing care.

Child Guidance

The Child Guidance Clinic of Greater Winnipeg continues to expand its very useful services. The total staff of the Clinic now numbers 87. There were over 7,000 children seen in all clinic departments in 1964. These children required a total of 9,966 assessments, an increase from 8,592 in the previous year. Increasing emphasis is placed on the treatment program in the clinic with significant satisfactory results.

The opening of the Child Development Clinic at the Children's Hospital this year will produce information which will be of very significant importance to the Child Guidance Clinic in the years immediately ahead. The problems of many children will have been assessed before they reach school age.

The Child Guidance facilities at the Brandon Mental Hospital were much improved with the completion of new quarters. During the year, there were 1,134 children seen in the clinic including 530 new patients. Total visits of these children numbered 2,367. In addition to these there were 502 children examined at the Travelling Clinics.

Out-Patients

The Out-Patient Departments of all our psychiatric facilities have again shown a very marked increase in services. In addition to services for children there was a total of 4,622 adult out-patients under treatment. These patients were seen for a total of 21,113 visits. These totals include follow-up visits of former in-patients. The increase over last year is approximately 18 percent with a total increase of over 100 percent in the past five years.

The newly-opened Selkirk Psychiatric Institute is a very significant and handsome addition to the total psychiatric facilities. It exemplifies the growing demand for community psychiatric services on a basis equal to the services provided for any other form or type of medical illness.

Psychiatric Institute

The Psychiatric Institute serves as a regional hospital for the Winnipeg area and for that portion of the province lying to the south and east. It functions as a short-term treatment and diagnostic centre in the Provincial Mental Health System serving a population which includes more than one half of the total population of the province.

In the past decade a combination of factors including the increasing application and effectiveness of psychiatric therapies, together with the shifting of population and concentration in the urban metropolitan area, have brought about a tremendous increase in the demand for service from this hospital. In the past year, the admission rate again increased by more than eight percent which is a total increase for the ten year period of over eighty percent.

Special problems are created at the institute by three categories of patients; juveniles, alcoholics and geriatric cases. These categories comprise only about one quarter of the total patients admitted to the hospital but are difficult to rehabilitate and return to the community because of the necessity of finding special programs and community resources to adequately meet the needs of continued care.

Other trends include a continuing decline in transfers to other mental hospitals, which this year decreased by a further seven percent, and the decline in average length of hospital stay which this year is just under twenty days. Both these figures reflect the intensity of work on the in-patient medical service.

The Out-Patient Department of the hospital functions as a Mental Health Clinic. Part of its work is in continued therapy for former in-patients. The remainder is a consultation, diagnostic and treatment service to which patients are referred by a wide variety of agencies in addition to family physicians and psychiatrists in private practice.

During the past year some 335 new adult patients were added to the case load of this department, in addition to the referrals from the in-patient service and to those patients already being carried in treatment. A total of some 6,800 individual examinations and interviews were conducted which represents an increase of about twenty-five percent. The travelling clinic, composed of a psychiatrist and a psychological team, visited five rural areas for the purpose of examining school children at the request of the Department of Education and a total of eighty-four children were evaluated.

Movement of Patients

	1964 <u>Total</u>	Total Previous <u>Year</u>
Remaining in Hospital December 31, 1963	41	48 (1962)
<u>Admissions:</u>		
First Admissions	569	466
Re-admissions	<u>406</u>	<u>418</u>
Total Admissions	975	884
(Less transfers from Mental Hospitals - Brandon, Selkirk, Portage la Prairie)	<u>13</u>	<u>24</u>
Total Direct Admissions	<u>962</u>	<u>860</u>
<u>Methods of Admission</u>		
General	642	553
Voluntary	201	179
Commitments	109	117
Retakes from Probation or Elopement	5	6
Medical Certificates	5	5
Total patients under treatment	1016	908
<u>Separations</u>		
Direct discharges	685	582
Transfers to Mental Hospitals (including return of transfers)	258	292
Transfers to Manitoba School (including return of transfers)	<u>13</u>	<u>10</u>
Total Discharges	956	884
Deaths	<u>5</u>	<u>9</u>
Total Separations	<u>961</u>	<u>893</u>
Remaining in Hospital December 31, 1964	55	41
Percentages of Deaths of Total Under Treatment	.41	1.03
Average Daily Population	52.6	50.57
Average Duration of Stay	19.69	20.88
Rated Capacity of Hospital	56	56

Forensic Service

During the past year a total of 175 referrals were made to the Institute by the courts and the probation service. This again represents an appreciable increase over the preceding year and indicates the increasing awareness of the courts of the use that can be made of psychiatric services in evaluating offenders and arranging psychiatric treatment where this proves to be indicated. Of the total examined, some thirty-one were subsequently admitted to one of the mental hospitals for continued investigation and treatment and a further number were continued in out-patient therapy while on probation or under sentence.

Teaching Program

The various members of the hospital staff continue as in previous years to fulfill a wide variety of responsibilities in several teaching and instructional programs. Included in this is the instruction and training of both undergraduate and postgraduate medical students. Didactic instruction and clinical seminars are also being provided for the Winnipeg General Hospital School of Nursing and for the School of Rehabilitation Medicine. In-service training experience for the School of Social Work was provided in 1964 and various staff members for both professional groups and members of the lay public.

Brandon Hospital for Mental Diseases

Objectives of programs centred in the Brandon Mental Hospital are to provide comprehensive psychiatric services to that portion of Manitoba west of, and including, Portage la Prairie. During the year, until September 1, 1964, the clinical services were organized into five psychiatric teams, with an additional Infirmary and Geriatric Service. On September 1, 1964 the region serviced by this hospital was subdivided into three geographical areas, corresponding to the existing Public Health Divisions, and called the Eastern, Western and Northern divisions respectively.

The Eastern division is essentially the Public Health area of Neepawa, Ste. Rose du Lac, and east to Portage la Prairie. The Western area includes the Birtle Public Health area west of Riding Mountain National Park, the Virden and the Brandon Public Health areas, and the area south of this to the United States border. The Northern area is essentially that area north of the Riding Mountain National Park.

Each of these areas is now served by a corresponding service, each with its own adult in-patient facility, adult out-patient referral, and responsibility for follow-up care. At present all Child Guidance and Travelling Clinics are the responsibility of Team 3 (Northern Division). Each service is responsible for the care and treatment of a proportion of continued service patients.

There continues, as previously, the Infirmary and Geriatric Service which gives these services to suitable patients already in the Hospital, and to which are admitted suitable Patients on their arrival at the Hospital. All proven effective methods of treatment for the mentally ill are employed at the Brandon Hospital.

There is general use of Electroconvulsive Therapy, and measures to better coordinate this procedure have been instituted. Techniques used,

precautions taken, and available equipment, have all been carefully reviewed.

Coma insulin is used on a small scale.

As of November 30, 1964, the Hospital population was 1,284 with 670 male and 614 female patients (including those on leave pass), this being a further drop of 55 patients over 1963.

Patient Population Movement

	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>	<u>1960</u>
1. Average Daily Patient Population	1319	1363	1467	1569	1620
2. % Discharged of Total Admissions	97.5%	90.6%	107.3%	116%	77.3%
3. % Deaths of Total Under Treatment	4.21%	7.8%	4.02%	3.29%	3.81%
4. Change in Patient Population	-55	-104	-102	-51	-10

The annual per capita cost was \$1,924.48, an increase of \$266.42 over the previous year.

The daily per capita cost was \$5.28, the per capita cost for the previous year being \$4.54.

Total net costs were \$2,598,050.53, an increase of \$210,432.63 over the previous year's \$2,387,617.90.

MOVEMENT OF PATIENTS

January 1, 1964 to December 31, 1964.

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Remaining Under Treatment at December 31, 1963.	710	629	1339
On Probationary Discharge or Otherwise Absent	<u>41</u>	<u>57</u>	<u>98</u>
Total on Books as at December 31, 1963.	751	686	1437

<u>FIRST ADMISSIONS</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
General Admissions	38	56	94
Voluntary Admissions	52	77	129
Other Sources	<u>22</u>	<u>9</u>	<u>31</u>
	112	142	254

READMISSIONS

General Admissions	22	14	36
Voluntary Admissions	78	76	154
Other Sources	<u>29</u>	<u>16</u>	<u>45</u>
	129	106	235

TRANSFER ADMISSIONS

From Psycho and other Manitoba Hospitals	55	28	83			
				<u>296</u>	<u>276</u>	<u>572</u>
				1047	962	2009

Of Transfer Admissions - Readmission to a mental hospital	(40)	(20)	(60)
Return from Probation	(15)	(11)	(26)

DISCHARGES AND TRANSFER DISCHARGES

With Psychosis -			
On Medical Advice	196	229	425
Against Medical Advice	9	2	11
Without Psychosis -			
On Medical Advice	66	46	112
Against Medical Advice	5	1	6
Observation Only and Undiagnosed	<u>2</u>	<u>2</u>	<u>4</u>
	278	280	558

<u>DEATHS</u>	51	31	82	<u>329</u>	<u>311</u>	<u>640</u>
Remaining on Books as at December 31, 1964.				<u>718</u>	<u>651</u>	<u>1369</u>
Remaining Under Treatment December 31, 1964.				670	614	1284
On Probationary Discharge or Otherwise Absent.				<u>48</u>	<u>37</u>	<u>85</u>
Total on Books as at December 31, 1964.				718	651	1369

DISCHARGES 1964 - BRANDON HOSPITAL FOR MENTAL DISEASES

<u>DIAGNOSIS</u>	<u>TIME IN HOSPITAL</u>						<u>Total</u>
	<u>0-3</u> <u>Mos.</u>	<u>4-6</u> <u>Mos.</u>	<u>7-12</u> <u>Mos.</u>	<u>1-2</u> <u>Yrs.</u>	<u>2-5</u> <u>Yrs.</u>	<u>Over 5</u> <u>Years</u>	
Schizophrenia	121	49	27	18	10	21	246
Manic Depressive	31	7	5	1	1	2	47
Paranoid Condition	3	-	2	-	1	2	8
Senile Psychosis	6	1	1	-	-		8
Pre-Senile Psychosis	1	-	-	-	-	-	1
Psychosis with Cerebral Arteriosclerosis	2	1	2	-	1	-	6
Psychosis due to Alcohol	5	2	-	1	-	-	8
Psychosis due to Epilepsy	2	-	-	-	1	1	4
Psychosis with Mental Deficiency	1	-	3	-	1	2	7
Other and Unspecified Psychosis	17	3	1	1	-	-	22
Psychoneurosis	70	7	2	-	-	-	79
Personality Disorders	48	6	-	3	1	-	58
Adult Maladjustment	4	-	1	-	-	-	5
Chronic Brain Syndrome	3	1	-	-	-	-	4
Alcoholism	23	4	3	-	-	-	30
Mental Defective	4	2	-	-	-	1	7
Epilepsy	10	2	-	1	-	1	14
Non-Psychotic and Observation	1	-	-	-	1	-	2
Undiagnosed	2	-	-	-	-	-	2
	354	85	47	25	17	30	558

Special Rehabilitation Procedures

(a) Programs based on Communication

Patient self-government has been continued on some wards, and used in a modified form on other wards.

Current events, group discussions, and formal group psychotherapy sessions are held.

(b) Programs based on Work, Occupational Therapy

Good use has been made of available facilities for work therapy, industrial therapy and occupational therapy.

The occupational therapy shops and classes are active. Many articles are sold in consistently substantial numbers.

Industrial therapy is increasing in scope. Emphasis is laid on regular attendance, punctuality, acceptance of work assignments, and good work quality. During the year, 245 Patients have worked in these shops, and of these, 100 have been probated or discharged. Sales of articles produced are substantial. Patients receive some remuneration, most Patients receiving \$1.00 per week. Financial control is through Mental Health Industries, a joint project of the Brandon Branch of the Canadian Mental Health Association and the Hospital.

Canteens operated by Patients, have been continued.

(c) Special Facilities for rehabilitation of Patients in domestic skills were established during the year in one of the team services.

(d) Programs based on recreation have been carried out to the same degree as in previous years.

Clinical Research by Teams

1. Investigation of an injectable drug in Electroconvulsive Therapy to prevent spinal fractures.
2. Continuation of investigation of drug therapy in various psychiatric disorders, including anti-depressants, and new anti-epileptic medications. The usefulness of prolonged action drugs is being investigated.
3. An investigation of the application of speech therapy in an effort to correct schizophrenic language and thought disorder.
4. Problems of psycho-therapy in Schizophrenia.
5. The value of pictorial art in psychoses.

Reducing Hard-Core Population

Constant attention is focused on the difficult residual group of Patients in the Hospital, which comprises two-thirds of the patient population. Many in this group are now elderly and suitable for Nursing Home Placement or family care. Every effort is made to expedite transfer of this group to other community resources.

Movement to the Community

In this large rural area, the Hospital serves as the hub of the regional mental health program.

Clinics from the Hospital, working with local health units, provide follow-up care for patients discharged from hospital, and also see new patients (adults and children). Closer centres are visited for one day monthly, those at a greater distance for two days monthly, and more distant centres are visited for two to three days every three months.

During the year, to November 30, psychologists completed 4,721 tests and dealt with 278 in-patients, 177 adult out-patients and 979 children.

There has been an increased demand for ungraded class assessments.

OUT-PATIENTS SEEN BY PSYCHIATRISTS,
OR PSYCHOLOGISTS, OR SOCIAL WORKERS, OR
SPEECH THERAPISTS, DURING 1964.

	) New Cases	565	Number of Visits	2,245
<u>BRANDON</u>	) Adults)			
	))	) Carried Over	672 (Estimate).	Number of Visits 4,546
	)			
	)			
	))	) New Cases	530	Number of Visits 1,045
	) Children)			
	)			
	)	) Carried Over	634 (Estimate).	Number of Visits 1,322
	)			
	))	) New Cases	144	Number of Visits 282
	) Adults)			
	))	) Carried Over	117 (Estimate).	Number of Visits 427
	)			
<u>TRAVELLING</u>	)			
<u>CLINICS</u>	)			
	)			
	))	) New Cases	387	Number of Visits 387
	) Children)			
	)			
	)	) Carried Over	115 (Estimate).	Number of Visits 277
		TOTAL NUMBER OF NEW CASES	1,626	
		TOTAL NUMBER OF CASES CARRIED		
		OVER	1,538	
		TOTAL NUMBER OF VISITS	10,531	

NEW CASES - SOURCES OF REFERRAL (Estimates).

Courts	43
Outside Hospitals	84
Self Referrals	131
Public Health	134
Schools	335
Physicians	543
Social Agencies	174
Others	182

Total 1,626

The Infirmary, Geriatric, and Tuberculosis Service has been under the direction of a specialist in Internal Medicine for the latter part of the year.

During the year, to November 30, 12 operations were performed in the Brandon Mental Hospital and 42 at the Brandon General Hospital, on mental hospital patients.

Staff from the Brandon Mental Hospital provided custodial care on many of the patients sent to the Brandon General Hospital.

Teaching clinics for all nursing staff were held on interesting cases, medical and surgical.

Laboratory

1. Education

(a) Combined Laboratory and X-Ray Course.

Seven students graduated and were placed in positions.

Ten students are in second year training.

Thirty students were accepted for training on September 1, 1964.

(b) Straight Laboratory Course

Five students are in second year training. Two students were accepted for training on September 1, 1964.

(c) The didactic training of students is given at the Manitoba Institute of Technology with further experience and training provided at the Branch Laboratory at the Brandon Mental Hospital.

Social Service Department

This department records admissions and social histories, maintains contact with families, places and supervises patients in foster homes, finds employment for patients and interprets mental health needs and programs to community agencies and groups.

During the year, there has been an increase in the number of chronically ill persons placed in foster homes. Eighty-one patients have now been established in homes under this program.

Statistical Research

Monthly statistical records are compiled in this department, covering the medical and paramedical services. Plans are now completed to provide similar monthly statistics on the various management programs for 1965.

Two papers on work done on administrative research projects have been published (or accepted for publication).

Biochemical Research

A research project concerned with the biochemical investigation of patients giving a superior response to phenothiazines was terminated in March 1964. The biochemical research section was then reorganized to carry out short-term investigations for medical staff on selected patients, plus special biochemical service for this hospital and the laboratory services of the Department of Health.

Since this laboratory first began doing special biochemical tests in 1961, there has been a steady increase in the number and type of tests being performed.

The laboratory has developed and adopted a number of new methods, in efforts to improve special biochemical methods already in use.

Canadian Mental Health Association

Valuable assistance to hospital programs was provided by the Brandon branch of the Canadian Mental Health Association during the year. Developments included:

- An expansion of the bowling program for hospital patients to 80 patients per week.
- Establishment of a housekeeping unit in a female ward, designed to re-train patients in housekeeping arts.
- Organization of a new group of volunteers to work in the Women's Pavilion.

Federal Health Grant funds provided books and equipment for libraries and service units, supplied bursaries for student technicians, some staff, and funds for two research projects.

Nursing Training - 1964

A training school for nurses has operated as in previous years.

	Number at Graduation <u>Date</u>	Total Number in School on <u>Enrolment Date</u>
Licensed Practical and Psychiatric Nurses	16	54
Male Psychiatric Nurses	13	33
Post-Graduate Psychiatric Nursing Course	-	5

Selkirk Hospital for Mental Diseases

The Selkirk Hospital for Mental Diseases provides a full spectrum of psychiatric services for the population it serves. This involves direct service to about 80,000 persons and final treatment facilities for two-thirds of the persons residing in Manitoba. Service areas include in-patient, out-patient and community clinic facilities. Duties of the professional staff overlap so that all proven methods of therapy are available in each area.

The Selkirk Hospital for Mental Diseases has a wide base of therapy and is extensively involved in community activities of therapy, follow-up, teaching and research.

Movement of Patient Population

	M.	F.	T.	Total Previous Year
On Register as at December 31, 1963	629	506	1135	1229
On Probation as at December 31, 1963	90	84	174	158
Remaining in Hospital as at December 31, 1963	539	422	961	1071

Admissions: -

	M.	F.	T.
Direct Admissions	226	224	450
Transfers	91	96	187
Total Admissions	317	320	637

Separations: -

Discharges	325	331	656
Deaths	44	39	83
Transfers (to other Mental Hospitals)	11	7	18
Total Separations	380	377	757
Patients Remaining in Hospital December 31, 1964	500	395	895
Patients on Probation as at December 31, 1964	66	54	120
Patients on Register as at December 31, 1964	566	449	1015

Additional Data

	<u>1964</u>	<u>1963</u>	<u>1962</u>	<u>1961</u>	<u>1960</u>
1. Average Daily Patient Population	923.36	1010.25	1096.28	1162.46	1214.81
2. Change in Patient Population	-66	-94	-64	-34	-62
3. % Discharged of Total Admissions	102.98	93.10	88.58	84.52	77.29
4. % Deaths of Total Under Treatment	3.62	5.56	4.47	4.77	4.83

Hospital Stay:

The number of patient days in hospital decreased to 337,026 (368,887; 400,142) representing an average daily population of 923 (1,011; 1,096). The hospital numbers were 66 less in residence than exactly one year previously.

In Patient Services

- (a) Acute Treatment Services - with the newly opened Selkirk Psychiatric Institute now in operation, about two new admissions are treated per day and approximately two patients per day are released to the community after an average treatment time of four months.

Following examination and diagnosis, treatments such as E. C. T., insulin,

drugs, psychotherapy and occupational therapy are administered. This area absorbs the services of eight physicians and assigned social workers and psychologists as well as a complement of nurses and occupational therapy workers.

The leading therapy is that of high-dosage ataractic drugs. In combination with other therapies, this approach has been one of the areas of pioneer activity of the Selkirk Mental Hospital and has led to the establishment of health for many persons who otherwise would have remained chronically ill.

- (b) Rehabilitation Services - centred in the older physical facilities, is a co-ordinated program of anti-regressive and re-socializing therapy. This program involves medical treatment, group psychological therapy, nursing remotivational therapy, specialized occupational therapy, and interest therapies. These various forms of therapy are co-ordinated with extensions into the community through the foster home program (Canadian Mental Health Association), industrial training areas (Skills Unlimited), meeting of home needs (Welfare), needs of training (Provincial Rehabilitation Co-ordinator); and hundreds of volunteers from numerous lay organizations.

This co-ordinated program is a highly integrated one and has been extremely successful in returning patients to various levels of activity in the general community.

Over the past year, 450 patients attended various phases of this rehabilitation program for two, three or five days per week, with an average of 200 patients involved on any one day. In addition, 188 patients received work habit training at Skills Unlimited with an average of 45 patients per day involved.

The Psychology Department in the hospital performed 1,423 psychological tests on 449 patients, plus 428 rehabilitation screening tests and 147 selection tests on student nurses. There were 484 hours of therapy, 180 hours of research and 45 hours of teaching.

SELKIRK HOSPITAL FOR MENTAL DISEASES

Discharges by Diagnosis and Length of Stay

Diagnosis	0-3		4-6		7-12		1-2		2-5		Over 5		Total									
	Months		Months		Months		Years		Years		Years											
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.										
Schizophrenia	78	102	180	28	36	64	21	26	47	11	10	21	11	4	15	39	8	47	188	186	374	
Affective Psychoses	15	22	37	1	4	5	5	1	6	1	2	3	1	-	1	1	1	3	4	24	32	56
Paranoid Conditions	2	3	5	2	-	2	1	-	1	-	-	-	1	-	1	-	-	-	-	6	3	9
Involuntal Psychosis	5	15	20	1	5	6	-	1	1	-	-	-	-	-	-	-	1	1	1	6	22	28
Psychoses with Old Age	4	4	8	2	1	3	1	1	2	-	4	4	1	-	1	-	2	2	8	12	20	
Psychosis Secondary to Diseases of the Nervous System	10	4	14	3	5	8	2	-	2	-	1	1	-	1	1	-	-	-	15	11	26	
Other Psychoses	10	10	20	1	4	5	1	2	3	-	-	-	-	-	-	-	-	-	12	16	28	
Chronic Alcoholism	19	4	23	4	1	5	1	-	1	-	-	-	1	-	1	1	-	1	26	5	31	
Psychoneurosis	6	9	15	1	3	4	3	-	3	1	-	1	1	-	1	-	-	-	12	12	24	
Pathological Personality	8	15	23	2	2	4	4	1	5	-	1	1	-	1	1	1	-	1	15	20	35	
Other Non-Psychotic Disorders	6	6	12	2	3	5	1	1	2	4	-	4	-	1	1	-	1	1	13	12	25	
	163	194	357	47	64	111	40	33	73	17	18	35	16	7	23	42	15	57	325	331	656	

These figures represent the integration of psychology into the professional treatment team approach.

Also, during the year, the Social Service Section opened 394 new files, developed a case load of 3,843 persons who were seen for 14,842 interviews and 7,479 follow-up visits.

- (c) Infirmatory Services - are designed to care for elderly and physically ill persons. Care and treatment is governed by the need of the individual and absorbs the time of one full-time and two part-time physicians.

Out-Patient and Community Services

A philosophical approach that has paid rich dividends is that of long-term follow-up of discharged persons to maintain their health after the needed hospital care. All physicians on the staff are involved, with one full-time physician following the more mobile and difficult cases.

Three community clinics, in Selkirk, Beausejour and Gimli extend treatment facilities to the local level and work intimately with the general practitioners in those areas.

Over 1,600 patients receive continuous follow-up from hospital staff and during the year, a record of 7,500 visits were made. Demand increases by about 300 patients per year. Without this care many would relapse into illness.

Out-Patients numbered 1,658 (1,832; 1,092) who were seen for 7,727 (6,081; 4,421) interviews. In this group were 1,629 adults and 29 children. Of the 527 new patients, 385 were seen away from the hospital in community set ups

Out-Patient Department - 1964

1.	Number of patients seen who were not former in-patients	55
	(a) New patients	10
	(b) Patients seen during the previous year(s)	45
	(c) Total interviews of patients in a) and b)	225
2.	Number of patients seen who were former in-patients	1,189
	(a) New patients	254
	(b) Patients seen during the previous year(s)	935
	(c) Total interviews of patients in a) and b)	5,225
3.	Patients seen "away from" the hospital in Community Health Clinics	* 385
	(a) New patients	* 244
	(b) Patients seen during the previous year(s)	141
	(c) Total interviews of patients in a) and b)	* <u>2,215</u>
4.	Total number of patients under 1, 2 and 3	1,629
	Total number of interviews under 1, 2 and 3	7,665

- * These totals include patients seen at Mount Carmel Clinic, Winnipeg - 40 patients - 216 interviews.

Patients seen in Child Guidance Clinic (not included in preceding report,

1. Number of new C. G. C. patients	19	
2. Number of previous C. G. C. patients	10	
3. Number of visits of new C. G. C. patients		24
4. Number of visits of previous C. G. C.		<u>38</u>
5. Total number of C. G. C. patients	<u>29</u>	
6. Total number of C. G. C. interviews		<u>62</u>

Scope and volume of work:

- (a) An admission rate of over 700; or about two patients per day to be completely evaluated and treated.
- (b) A discharge rate of approximately 100%.
- (c) A fall off in hospital population to below 900 (from a high of 1,265).
- (d) Over 200 persons in foster homes.
- (e) Over 1,600 patients in continuous post-discharge follow-up; for over 7,500 (medical) interviews.
- (f) Some 1,350 psychological tests on 425 patients.
- (g) Hours of psychological effort; 98 in selection procedures for nurses; 500 in group therapy; 180 in research.
- (h) Social service activity of 350 active cases; 650 in-hospital interviews; 7,100 home visits.
- (i) Laboratory services of 2,400 tests; 3,500 x-rays; 145 E. K. G. 's; 215 E. E. G. 's.

In teaching activities, the hospital and its personnel provide:

- A full course of training for psychiatric nurses. In 1964 there were 10 graduates from the School with an undergraduate enrollment of 54.
- Affiliation courses for Registered Nurse students from the Grace and St. Boniface Hospitals.
- Refresher courses for Public Health Nurses from the Province, City of Winnipeg and Indian Health Services.
- A one-day experience for all medical students of the University of Manitoba.
- A full participation in the training of psychiatrists in the University of Manitoba course for Specialty in Psychiatry.
- Experience seminars for social workers, psychology students.
- Lectures to Theology Students at United College and to pharmacists and other groups.
- In the coming year formal connections with the School of Social Work; School of Occupational Therapy; and the Ph.D. Psychology course are to begin.

In this regard four staff psychiatrists are on the faculty of Medicine, University of Manitoba; one psychologist is attached with the faculty of Psychology, one nurse is on committees of the Manitoba Association of Registered Nurses, and several nurses hold positions on the Educational Advisory Committee for Psychiatric Nurses.

Manitoba School

Abilitation of the mentally retarded is the primary objective of the Manitoba School for Mentally Defective Persons at Portage la Prairie.

Although 40 percent of the patients at the Manitoba School can only profit from custodial care, efforts directed toward the educable include school classes for children and social and work training programs for adolescents.

The Manitoba School is equipped to handle approximately 1,100 patients over the age of six years.

PATIENT POPULATION

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Remaining under treatment, December 31, 1963	579	523	1102
First admissions	47	32	79
Re-admissions	19	5	24
Discharges	40	18	58
Deaths	9	16	25
Remaining under treatment December 31, 1964	596	526	1122
Number of Out-Patients			166

Services included:

Hospital and Infirmary

Although the general function of a hospital is provided, the outstanding activity here is the operation of the cerebral palsy treatment clinic. The object of this special cerebral clinic is to prevent as many as possible from becoming bedridden with progressive contractures and progressive muscle wasting. The active and mobile spastic is more happy and easy to care for, even with minimal results. Unfortunately, present case load exceeds working space and staff, but satisfactory progress has been made. Much benefit is derived from assistance of auxiliary professional personnel from the Rehabilitation Hospital.

Statistics:

On Active Treatment with Physical Disabilities	57
Possible Daily Case Load	29
Total Number of Cases with a Severe Disability	261

School Department

This training area is departmentalized to meet the various and complex needs of the children as they grow older so is not a static but rather an ever-changing picture. The various levels of training include:

- A kindergarten (sense training)
- Classes for trainable children (non-academic)
- Classes for educable children up to Grade 4 levels
- Socialization and training
- Abilitation training and follow-up (occupation, recreation, work placement training, job placement - Community).

Each of these levels engage different types of staff work but represent progressive program throughout.

Statistics:

Number of Teachers	8
Number of Pupils	139
- Class A1, A2	16 pupils
- Class B1, B2, B3	23 pupils
- Class C1, C2, C3	23 pupils
- Class D1, D2, D3	23 pupils
- Class E1, E2	17 pupils
- Class F	9 pupils
- Physiotherapy Class	28 pupils
- Music with all classes	
- Art with four classes	

Craftroom

Approximately 140 girls are occupied daily with Craft Work.

School of Nursing

A psychiatric nursing training course is provided at this institution by a well-established school of nursing.

Statistics:

<u>Staff Training</u>	<u>1963</u>	<u>1964</u>
Number of Student Nurses Enrolled as of November	56	56
Number of Student Nurses Graduating	18	13
<u>Affiliations</u>		
A. For Manitoba School Nurses:		
Brandon Mental Hospital (24 wks.)	12	17
Winnipeg General Hospital (16 wks.)	9	10
B. Provided by the Manitoba School for:		
Brandon Mental Hospital (6 wks.)	28	29
Selkirk Mental Hospital (6 wks.)	10	12

Residential Care

Every effort is made to provide activities for this largest group that are normal to any community. These include:

- Religious exercises
- Concerts, plays, pantomime
- Outdoor games, sports, bus trips
- Classroom occupation and ward activities, radio, television, parties, visiting.

Problems of mass living have been alleviated to the greatest possible extent with our present resources and the general atmosphere reflects a fair degree of success.

Cottage System

A development of major significance in Manitoba's approach to the problem of mental retardation was put into effect at the Manitoba School in 1964, with the establishment of the Cottage system of living. Three cottage units with a living capacity of thirty people per unit were constructed and occupied by young male patients transferred from other buildings. This system provides:

- Home like surroundings.
- Open doors (freedom of movement).
- Training for community living by self maintenance, individual responsibility and discipline, and small group activities.
- Appointment of a house matron to provide the Mother image and female influence.

Because of the special features of cottage life, (open door policy and self maintenance), criteria used to select residents were based on certain characteristics of patients, such as:

- Degree of knowledge of hygiene.
- General Behaviour.
- Ability to progress in training, and proceed to higher levels of individuality and responsibility.
- Physical condition.
- Ability to use normal household appliances and use facilities for clothing storage, personal hygiene and home recreation.
- Potential for eventual abilitation on a self-supporting and independent basis in free society.

Each cottage will provide for different age groups but will allow transfers as age increases and activities multiply toward working in the community.

Farms Management

Three institutional farms involving 4,173 acres of land are operated by the department in conjunction with the Hospitals for Mental Diseases at both Brandon and Selkirk, and Manitoba School for Mentally Defective Persons at Portage la Prairie. These farms are maintained to produce food for institutional use and are of therapeutic value to the patient.

Institutional grounds, for the most part, are maintained by occupational groups under the direction of trained farm staff. Greenhouses supply bedding plants for flower beds and vegetable gardens, and plants and flowers for hospital wards.

Land Use and Field Crops and Gardens

<u>Total Farm Acreages -</u>	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Field Crops -	491	485	355.28	1331.28
Hay and Pasture -	1204	640	262	2106.
Potatoes and Vegetables -	101	60	73	234.
Hospital grounds, roads, undeveloped land, etc. (rented land included)	244	172.89	85	501.89
Total Acreages -	2040	1357.89	775.28	4173.17

Field Crops and Gardens

The very cool spring in 1964 delayed germination of garden crops, which allowed weeds to become a problem before seedling plants were large enough to cultivate. This resulted in below average yields of such vegetables as onions and carrots. The potato crop yield was very high but the disease known as 'ring-rot' greatly lowered their keeping quality. Grain crops were above average for the province but early frost cut yields of corn fodder and second-cut hay drastically. Some hay fields, such as alfalfa, did not recover from winter killing in 1962-63 and a breaking and reseeding program is now in operation. Fall work was completed on all farms and, with an adequate supply of early spring moisture, prospects should be good for 1965.

Grain and Forage Crops

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Oats, bus.	14675	12000	11680	38355
Barley, bus.	3060	-	-	3060
Ensilage, ton	505	180	280	965
Hay, ton	190	228	159	577
Green Feed, ton	-	-	25	25
Sweet Clover, ton	245	-	-	245
Sweet Clover, bales	-	-	6400	6400
Straw, ton	-	163	-	163
Straw, bales	-	-	8500	8500
Mangels, ton	66	-	-	66

There were 175 tons of seasonal vegetables supplied to the institutions during the summer months, plus approximately 826 tons of staple vegetables put into storage for use during the winter.

Staple Vegetables Supplied to the Institutions - 1964

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Beets, lbs.	23725	8710	14570	47005
Cabbage, lbs.	39650	6826	22295	68771
Carrots, lbs.	24630	9420	13210	47260
Onions, lbs.	19065	9885	11335	40285
Parsnips, lbs.	9505	1210	-	10705
Potatoes, lbs.	365575	157740	261380	784695
Turnips, lbs.	43035	7420	33485	83940

Returns from

Sale of Vegetables	\$670.30	-	-	\$670.30
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Cattle

The pure bred Holstein herds at the three institutional farms continue to improve in quality. Besides supplying the institutions with fresh whole milk daily, many animals are made available to dairymen and farmers throughout the province for breeding purposes.

Cattle from the Hospitals for Mental Diseases' farms, at both Brandon and Selkirk, have been shown at "A" class fairs with excellent results. Plans are now underway to breed some of the cattle in the Manitoba School herd through

artificial insemination to take advantage of the superior type sires available through the A.I. Units.

Cattle and Milk Production - 1964

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Returns from				
Sale of Cattle -	\$10,711.30	\$6,420.97	\$4,142.95	\$21,275.22
Milk and Cream to				
Institutions, lbs. -	1,229,760	892,184	731,660	2,853,604
Milk fed to Stock -	211,260	37,905	71,800	320,965
Total production -	1,441,020	930,089	803,460	3,174,569

Inventory - December 31, 1964

Number of head				
on hand -	260	209	171	640
Inventory value -	\$45,975.00	\$40,800.00	\$29,615.00	\$116,390.00

Hogs

A program of cross-breeding the Yorkshire with the Lacombe breed was introduced this past year. This breeding program will take advantage of hybrid vigor and improve other characteristics in the stock. A further back-crossing program will be tested in 1965.

As in the past, swine herds at Brandon and Selkirk are raised principally for food use in the institutions but any surplus hogs, which are mainly from the Selkirk farm, are sold to packing plants.

Hog and Pork Production, Sales and
Inventory - 1964

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Returns from				
Sale of Hogs -	\$708.92	\$6,002.71	-	\$6,711.63
Pork supplied to				
Institution - lbs.	58,518	31,543	-	90,061

Inventory - December 31, 1964

Number of Hogs				
on hand -	255	211	-	466
Inventory Value	\$7,295.00	\$5,940.00	-	\$13,235.00

Machinery and Equipment

Due to a decline in patient man-power, more mechanical equipment has been purchased for field work and further mechanization will be necessary for garden use.

Farm Buildings

The barn and granaries destroyed by fire in 1961 at the Selkirk Hospital were replaced in 1964. Maintenance was carried out on the greenhouse and root-cellar at the Brandon Hospital and the greenhouse at the Manitoba School is being replaced.

TOTAL FARM INVENTORIES (December 31, 1964)

	<u>Brandon</u>	<u>Selkirk</u>	<u>Portage</u>	<u>Totals</u>
Grain and Feed	\$12,438.50	\$12,647.70	\$10,212.10	\$35,298.30
Vegetables	5,514.75	2,371.00	3,511.20	11,396.95
Livestock	53,830.00	46,900.00	29,815.00	130,545.00
Machinery, etc.	31,731.00	29,296.00	22,099.30	83,126.30
Totals -	\$103,514.25	\$91,214.70	\$65,637.60	\$260,366.55

Inventory values show livestock and produce below sale values,
and hay and grain at local prices.

HEALTH

HEALTH SERVICES

The Health Services Section is responsible to the Deputy Minister for administration of public health services and prepaid laboratory and x-ray services.

Public Health services are carried on within the City of Winnipeg by the City Health Department which acts independently from the provincial services, but receives financial and consulting support from the Provincial Department. Outside of the City of Winnipeg, 83% of the people receive public health services through local health units, directed by full time medical health officers with a staff of full time public health nurses and public health inspectors.

In areas not served by local health units, The Public Health Act requires the appointment of part-time medical officers. These men are supported by consultants in the preventive medical field and nursing and sanitation personnel assigned to these areas. There is no organized public health program in these regions as they lack the coordination of a full time medical director.

Health Services Section is also responsible for the administration of services used to support local health units and other services in the field. These supporting services include the Section of Preventive Medical Services, Environmental Sanitation, Dental Services, Public Health Nursing, Fred T. Cadham Public Health Laboratories, supervisory staff for laboratory and X-ray technicians and the health component of Care Services.

The Department of Health, through Health Services, does not provide direct medical care to any area.

Under the Health Services Act, the approval of the Minister is required to set up a Medical Care District. Ministerial approval is also required on the contract which has been made between the municipality and the practising physician in Medical Care Districts. Ten Medical Care District contracts were in operation during the year for the provision of general practitioner service to the residents of their areas. Provision is also made under Part III of The Health Services Act for a grant of 50 cents per capita for persons in a Medical Care District where the municipality is also included in a local health unit and a laboratory and X-ray unit. Seven of the above contracts qualify for this grant.

Local Health Services

Local Health Services, through local health units, offer comprehensive public health programs under the direction of full time medical directors with special training in this field, supported by the full resources of the department. In addition, there is a staff of full time public health nurses, public health inspectors, and clerical staff who give continuity to the program. The program is not rigid, but one adapted to the needs of each individual unit, and to the different regions within the unit. Considerable guidance from the local Advisory Board is necessary.

All staff members receive continuing in-service education to keep them abreast with the latest changes in preventive medicine.

During 1964, there were 14 local health units and six Laboratory and X-ray units in operation, and laboratory and X-ray services were extended to the Pine Falls and Pinawa Hospitals.

RECORD OF POPULATION, ESTABLISHED POSITIONS, STAFF
VACANCIES, AND STAFF ON COURSE IN HEALTH UNITS - 1964

Health Units	Population	Medical Directors	Public Health Nurses	Public Health Insp.	Clerical	Nurses Aids
Brandon	33,407	1	7	3	2	
Dauphin	23,830	1	6	1	2	
Kildonan	61,611	1	9	3	3	
Neepawa	27,260	1	6	2	2	
Portage	33,086	1	7	2	3	
Red River	25,236	1	5	1	2	
St. Boniface	51,848	1	9	3	3	
St. James	85,017	2	12	5	5	
Selkirk	38,995	1	8	3	3	
Swan Valley	16,169	1	5	2	2	
Northern	19,334	1	4	1	1	
Stonewall	21,544	1	5	2	2	
Virden	24,395	1	6	1	1	
Birtle-Shoal Lake	22,238	1	5	2	2	
Northern Health Services	18,494	2	5	3	3	5
Total	502,459	17	99	34	36	5
Vacancies		1	4	4	-	-
On Course		3	4	6		

In the fall of 1964, responsibilities of Northern Health Unit at Flin Flon were expanded to include some regions presently under the administration of Northern Health Services. This arrangement will improve services in the north and help stabilize staffing in this area.

At the end of 1964, 83% of the people in the Province of Manitoba were receiving full time organized public health services.

Laboratory and x-ray services are available to approximately 48% of the population in that part of the province for which they are intended.

Prepaid laboratory and x-ray services are designed primarily for rural areas where usual diagnostic services are not available. The Metropolitan Winnipeg and Brandon areas are excluded at present.

Specific Health Unit Programs Include:

Community Sanitation Programs

Supervision of housing, water supplies, sewers, and septic tanks, garbage disposal, food and milk, restaurants, food sources, and health hazards in industries is carried out on a continuous basis.

During the year, public health inspection staff undertook to make regular inspections of hospitals in rural Manitoba in co-operation with the Manitoba Hospital Commission. Although such inspections have been done in the past on request, this change to a regular basis was made to reduce possibilities of spread of disease within hospitals, particularly through food.

<u>Field Visits</u>	<u>1963</u>	<u>1964</u>
a. Plumbing Inspections	2,977	3,155
b. Sewage Disposal Systems - Private	1,419	1,748
c. Municipal Disposal Systems or Water Supply	926	918
d. Public Premises and Public Accommodation	1,964	907
e. Industrial Premises and Offices	228	865
f. Private Premises	2,577	3,486
g. Camps	213	215
h. Bathing Premises	413	546
i. Schools	580	545
j. Vermin and Rodent Control	762	640
k. Ice Cutting and Storage	20	68
l. Waste Disposal Grounds	422	1,030
m. Nuisances	2,293	1,932
n. Institutions and Boarding Homes	827	684
o. Barbershops	594	450

Food and Milk

a. Raw Milk Producers	386	552
b. Milk Processing Plants	467	398
c. Food Retail Outlets	1,342	1,156
d. Restaurants and Beverage Rooms	2,897	3,331
e. Food Processors (incl. Ice Cutting and Bottling Plants)	500	866
f. Food Complaints	87	169

Sampling and Field Tests

a. Bacteriological Analyses - Water	6,601	7,034
b. Milk - Raw	3,761	2,570
c. Milk - Pasteurized	3,251	3,016
d. Food	218	262
e. Swab Rinse Tests	915	586
f. Field Tests (O. T., C. O., Etc.)	658	880
g. Chemical Analysis - Water	N. R.	13
h. Butter Fats	N. R.	279

Communicable Disease Control

Communicable diseases are those spread by infective agents. The health officer attempts to control disease by promoting good nutrition, health habits, etc., from prenatal care throughout life. In addition, specific protection is given by immunization. It is recommended that this be done by the private physician, but materials are supplied by the health officer. The health officer also carries out immunization in schools, and well-baby clinics for those who cannot get to their own doctor. In some areas the practising physician prefers to have this done by the Health Department.

<u>Immunization</u>	<u>1963</u>	<u>1964</u>
a. Smallpox vaccination	9,443	5,778
b. Smallpox re-vaccination	21,612	16,172
c. DPT (Series Completed)	121	254
d. DPT (augmenting)	16,066	1,179
e. D.T. (Series Completed)	2,287	1,079
f. D.T. Augmenting	16,066	9,973
g. Polio - Series of 3 Doses	620	637
h. Polio - Boosters	3,594	1,525
i. DPT with Polio (Series Completed)	8,995	5,246
j. DT with Polio (Augmenting)	8,515	11,712
k. Typhoid and Paratyphoid		
1) No. Having Completed Series	2,877	188
2) No. Having Booster Doses	38	1,504
l. Other (Specify)		
1) Tetanus	14	40
2) Gamma Globulin	121	751
3) T.A.B. T. Series	36	69
4) T.A.B. T. Augmenting	10	-
5) Typhus	2	3
6) Skin Reaction	8	-
7) Diphtheria	37	2
8) Flu Vaccine	6,363	399
9) "K" Injection	1	-
10) Quad Booster	793	3,979
11) Cholera	-	3
12) Sabin	-	183,168
13) B.C.G.	-	323
14) Time Test	-	1
m. Tests		
1) Schick	743	460
2) Tuberculin	3,994	3,803

The Health Department tries to control communicable diseases by isolating known carriers of the diseases, and controlling known methods of spread of disease. This involves regular supervision of food establishments, milk, garbage and waste disposal.

Venereal Disease Control

Health Unit personnel investigate and follow-up venereal disease cases and contacts, and arrange for treatment. Free drugs are carried in units, and distributed free to the practising physicians.

<u>Venereal Disease in Health Unit Areas</u>	<u>1963</u>	<u>1964</u>
a. New Cases of Syphilis	22	3
b. New Cases of Gonorrhoea	149	56
c. Contacts of V.D.	28	82
1) Names	126	101
2) Located	96	121
d. Field Visits	162	133
e. Treated		63

Tuberculosis Control

The local health unit co-operates with the Sanatorium Board in carrying out regular surveys. The responsibility of follow-up of contacts and arranging for admission rests with the local health officer.

<u>Tuberculosis in Health Unit Areas</u>	<u>1963</u>	<u>1964</u>
a. New Cases Reported - Total	121	37
1) Arrested	8	18
2) Active Bacillary	77	14
3) Non-Pulmonary	7	1
b. Total cases Under Supervision at Home	1,586	757
c. Total Cases in Sanatorium	296	117
d. Number of Chest X-Ray Clinics	13	26
1) Attendance of Cases	124	119
2) Attendance of Contacts	224	1,888
e. Field Visits	2,449	1,882

Prenatal Classes

Educational efforts and disease prevention are best directed where risks are increased. In line with this thought, the health unit organizes and conducts prenatal classes which are, in fact, educational classes to acquaint prospective mothers with the importance of regular prenatal care by her family physician, and to educate her in the proper health habits during pregnancy, and to prepare her for proper care of the newborn child.

Prenatal Classes - Instruction and Education in Health Unit Areas

	<u>1963</u>	<u>1964</u>
a. Prenatal Instruction		
1) No. of Classes	655	589
2) Attendance	5,417	4,379
b. Meetings attended or held	443	177

Child Health Conferences

The local health unit attempts to have a public health nurse visit each newborn baby in its home soon after discharge from hospital. This is to discuss with the mother, the important health care habits including postnatal visits for the mother and regular follow-ups of the child during its first year of life. At this visit, the subsequent child health conferences, the mother is counselled on proper feeding habits, including the use of vitamins to prevent deficiency diseases. The mother is also educated in the dangers of accidents due to poisoning which are the major hazards in the early years of an infant's life.

	<u>1963</u>	<u>1964</u>
a. Child Health Conferences		
1) No. Held	2,178	2,178
2) Attendance	43,652	39,325
a) Infants	21,878	19,843
b) Preschoolers	21,599	16,238
c) School Children	141	823
d) Adults	74	2,421
b. Diaper Tests (P. K. U.)		163

Preschool Medical

The health unit organizes and tries to insure the examination of each child, preferably by his own physician prior to admission to school to ensure the child is fully equipped to undertake school, and that any health handicap is corrected or minimized so that he will receive the fullest benefit of education. Where necessary, the public health nurse in the school can assist in interpreting defects to the teacher.

<u>Medical Services in Health Unit Areas</u>	<u>1963</u>	<u>1964</u>
a. Consultations and Diagnostic Visits with Physicians	783	464
b. Meetings attended	528	614
c. Medical Examinations		
1) Preschoolers	4,186	2,615
2) School Children	3,016	4,044
d. Defects Detected		
1) Preschoolers	657	417
2) School Children	1,715	1,670
e. Defects Treated and Corrected	310	407
f. Field Visits	274	533

School Age

The health unit takes an interest in the school health program, and provides ready assistance to teachers in planning their health program. The members of the unit visit the school and carry out immunization programs, or assist in educational programs.

<u>School Health Program - Health Unit Areas</u>	<u>1963</u>	<u>1964</u>
a. Pupils Interviewed by Nurses	N. R.	14,346
1) Visions Only	29,582	33,932
2) Audiometer Testing	3,612	4,431
b. Teachers Interviewed		
1) Re Pupils	7,988	6,985
2) Re Health Program	3,982	4,719
c. Group Instruction	82	544
d. Group Inspection	-	2,293

Chronic Disease

The medical officer is active in this increasing load of chronic disease or disease of the aged. The health unit will assist in care of such people at home by sending a nurse to provide care where necessary, but preferably this nurse will educate members of the family to undertake these duties. The health unit can also assist in providing or making arrangements for nursing home care or institutional care where this is necessary.

Geriatrics

	<u>1964</u>
a. Private Homes	16 visits
b. Boarding Homes	46 visits
c. Nursing Homes	105 visits
d. Hospitals	28 visits
Medical Clinics	18
1) Attendance	308
Nursing Clinics	23
1) Attendance	569

Crippled Children

The health unit works closely with the Society for Crippled Children and Adults, and serves to arrange local clinics for visiting teams. Similar co-operation is worked with the Canadian Arthritis and Rheumatism Society.

	<u>1963</u>	<u>1964</u>
a. Field Visits	861	730
b. Diagnostic Clinics - No. Held	12	14
1) Attendance	79	49
c. Physiotherapy Clinics - No. Held	1	2
1) No. Receiving Treatment	-	25
d. Visits to Cancer Patients	84	42

Mental Health

The local health unit is becoming increasingly involved in the field of mental health which is moving out of the large mental hospitals, and back into the community. Discharges from mental hospitals are often preceded by a home investigation by the local health unit to prepare the family for re-entry of the person into the family circle. Follow-up visits are made by public health nurses, and arrangements are made for the patient to attend travelling clinics at the health unit when a team of psychiatrists, psychologists, and social workers visit from the out-patient department of mental hospitals. In addition, public health nurses make preliminary investigations of home facilities to prepare a report on cases referred to visiting clinics by practising doctors in the area.

	<u>1963</u>	<u>1964</u>
a. Field Visits	1,806	2,020
b. Mental Health Clinics		
1) No. Held in Unit Area	175	174
2) Attendance	1,347	1,751
c. Speech Therapy		
1) No. of Clinics	19	40
2) Attendance	160	258

Laboratory and X-Ray Unit

These units, commonly referred to as diagnostic units provide laboratory and X-ray services within hospitals in the health unit area. These facilities come under the administrative direction of the medical officer of the unit, and are subject to review by the Advisory Committee. The unit is staffed by qualified

technicians trained in both laboratory and X-ray technologies. The units offer a wide range of laboratory tests without charge. All in-patient services are rendered without charge to the patient, as these are covered under the Manitoba Hospital Services Plan. Persons who are not admitted to hospital, are charged \$1.00 for the first X-ray and 25 cents for each additional X-ray to a maximum of \$5.00 per illness. This does not include accident victims who are seen within 24 hours of an accident. Such persons are covered under the Manitoba Hospital Services Plan and no fee is charged. Persons not resident in the health unit area, or in another health unit area, must pay the regular fee for having laboratory tests or X-rays done at the diagnostic unit.

All tests carried out must be ordered by a physician attending the patient. These may be ordered by any licensed physician in the province who is attending the patient, and not necessarily the physicians in the unit or hospital in which the laboratory is located.

RECORD OF POPULATION, ESTABLISHED POSITIONS, STAFF
VACANCIES, AND STAFF ON COURSE IN LABORATORY & X-RAY UNITS, 1964

Lab. & X-Ray Units	Population	Medical Directors	Medical Technicians	Clerical
Dauphin	23,830	1	8	1
Selkirk	35,355	1	8	1
Virden	29,989	1	9	1
Neepawa	27,358	1	8	1
Portage	35,432	1	9	1
Birtle-Shoal Lake	22,238	1	8	1
Supervisory Staff at Portage			4	
Total	174,202	6	51	6
Vacancies			4	

Laboratory and X-ray technicians depend largely on in-service training and regular visits by supervisory staff from Portage la Prairie for guidance. During the year, a two-day refresher course was held in Brandon for combined technicians and a one-day course in X-ray and electrocardiography was held at Portage la Prairie. Twenty-three technicians attended both courses.

The Department continued to train regularly, combined technicians who receive full qualification in both laboratory and X-ray technology. These combined technicians are trained to staff small hospitals that cannot support separate technicians. This program is unique in Canada and possibly elsewhere.

During the year, eleven combined technicians, one straight laboratory technician, and two straight X-ray technicians were graduated. Since the fall of 1963, all technicians, have taken their didactic training at the Manitoba Institute of Technology in Brooklands. The laboratory section of this training has been increased from six to nine months commencing September, 1964.

SUMMARY OF LABORATORY AND X-RAY WORK, 1964

Laboratory	X-Ray Units	No. of X-Ray Examinations		Hospital Admission Chest X-Rays	Laboratory Work (DBS Units) *	
		In-Patients	Out-Patients		In-Patients	Out-Patients
Dauphin		3, 217	4, 601	1, 382	57, 605	31, 405
Selkirk		2, 368	4, 757	1, 253	39, 342	16, 511
Virden		2, 581	4, 997	1, 756	38, 887	39, 096
Neepawa		2, 910	5, 555	1, 500	44, 745	28, 551
Portage		2, 876	5, 724	1, 398	59, 446	48, 305
Birtle-Shoal Lake		3, 631	4, 554	1, 669	40, 616	35, 472
TOTAL 1964		17, 583	30, 188	8, 958	280, 641	199, 340
TOTAL 1963		15, 744	23, 220	7, 693	225, 532	158, 872
INCREASE 1963-1964		11.7%	29.9%	16.5%	24.5%	25.8%

* Laboratory work is expressed in Dominion Bureau of Statistics Units (DBS Units). This expresses the various tests performed in fixed units of work with each unit supposedly representing ten minutes of the technicians' time. This is now a standard measurement used in hospital statistics. In large laboratories with mass techniques, a technician can do many tests simultaneously, and this accomplishes many more DBS units of work. In small laboratories, the output in DBS Units will be relatively less.

ENVIRONMENTAL SANITATION

Work of this technical branch of the health division is directed through five sub-groups: public health engineering, food control, industrial hygiene, general public health inspection and the provincial sanitary control commission. This section provides assistance and service in all phases of sanitation and hygiene, as applicable to the living, working and recreational environments of the citizens of Manitoba.

Technical staff includes a chief engineer, five public health engineers, three agrologists (food experts), four chemists, four medical technicians, one instrument technician, one laboratory assistant and nine public health inspectors.

Public Health Engineering

Practical assistance and service to the public is the main function of the engineering program, with priority being given those facilities which serve the public en masse - such as municipal waterworks and sewerage systems.

Systems Serviced by Public Health Engineering in 1964 (Exclusive of Metropolitan Winnipeg)

	<u>Number</u>	<u>Population Served</u>
Waterworks systems	72	146,834
Sewerage Systems	83	149,104

Services are provided on request to municipalities served by Metropolitan Winnipeg.

Approximately 57 percent of the population of Manitoba is served with water artificially fluoridated to a level of one part per million fluoride.

Waterworks Systems in Manitoba as of 31st December, 1964

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Source</u>	<u>Treatment</u>
Altona	Town	2,026	River	Solids contact, filter, chlorine
Beausejour	Town	1,770	Wells	Iron removal
Birtle	Town	846	Well	Iron removal
Boissevain	Town	1,303	Lakes (P. F. R. A. Res.)	Solids contact, softening, filter, chlorine, fluoride
Brandon	City	28,166	River	Solids contact, softening, filter, chlorine, fluoride
Carman	Town	1,930	River	Solids contact, softening, filter, chlorine
Cartwright	Village	482	Well	Iron removal, zeolite softening, chlorine
Dauphin	Town	7,374	Lake	Chlorine, fluoride
Dominion City (R. M. Franklin)		534	River	Filter, zeolite softening, chlorine

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Source</u>	<u>Treatment</u>
Deloraine	Town	916	P. F. R. A. Res.	Solids contact, softening, filter, chlorine
Elie	(R. M. Cartier)	370	Gravel Pit	Zeolite softening, chlorine
Emerson	Town	932	River	Settling, filter, zeolite softening, chlorine
Erickson	Village	531	Well	Iron removal, zeolite softening, chlorine
Flin Flon	Town	10,546	Lake	Heating, chlorine
Gilbert Plains	Village	849	River	Solids contact, softening, filter, chlorine
Gimli	Town	1,841	Well	Chlorine, fluoride
Gladstone	Town	944	River	Settling, filter, chlorine
Great Falls	Village	164	River	Chlorine
Gretna	Village	575	River	Solids contact, filter, chlorine
Hamlota	Village	779	Well	Solids contact, softening, filter, chlorine
Hartney	Town	592	Well	Iron removal, chlorine fluoride
Holland	(R. M. Victoria)	433	Well	Iron removal, chlorine
Kelwood	(R. M. Rosedale)	323	Well	Chlorine
Killarney	Town	1,729	Lake	Settling, filter, chlorine fluoride
MacGregor	Village	642	Well	Chlorine
Manitou	Village	863	Creek (P. F. R. A.)	Cold lime softening, filter, chlorine
Melita	Town	1,038	Well	Iron removal
Minnedosa	Town	2,211	Well	Iron removal, fluoride
Morden	Town	2,793	Creek (P. F. R. A.)	Settling, filter, chlorine
Morris	Town	1,370	River	Settling, filter, chlorine, zeolite, softening
Neepawa	Town	3,197	River	Solids contact, softening, filter, chlorine, fluoride
Pilot Mound	Village	802	Well	Cold lime softening, filter, chlorine
Portage la Prairie City		12,388	River	Solids contact, softening, chlorine, fluoride
Powerview	Village	902	River (from Pine Falls)	Settling, filter, chlorine
Reston	(R. M. Pipestone)	529	Well	Iron removal, chlorine
Rivercrest (West St. Paul)	Local Imp. Dist.	Est. 400	Well	Nil
Rivers	Town	1,574	River	Settling, filter, chlorine, heating
Roblin	Town	1,368	Well	Iron removal
Rosburn	Village	591	Well	Iron removal, zeolite softening, chlorine
Russell	Town	1,263	Wells	Nil
St. Lazare	Village	449	Springs	Chlorine

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Source</u>	<u>Treatment</u>
Selkirk	Town	8,576	Wells	Chloramine
Shoal Lake	Village	774	Well	Iron control
Souris	Town	1,841	River	Settling, filter, zeolite softening, chlorine, fluoride
Steinbach	Town	3,739	Wells	Fluoride, iron control
Ste. Rose du Lac	Village	790	River	Solids contact, softening, chlorine
Swan River	Town	3,163	Wells	Iron removal, zeolite softening, chlorine
The Pas	Town	4,671	River	Settling, filter, chlorine, fluoride
Treherne	Village	569	Well	Iron removal, zeolite softening, chlorine
Virden	Town	2,708	Wells	Chlorine
Winkler	Town	2,529	Well	Solids contact, softening, chlorine, fluoride
Winnipeg Beach	Town	807	Well	Chlorine

Municipalities Served by Metropolitan Winnipeg (Source: Lake of the Woods)

Assiniboia	R. M.	6,088	Via Winnipeg - St. James
Brooklands	Town	4,369	Via Winnipeg
Charleswood	R. M.	6,243	Via Winnipeg - Tuxedo
E. Kildonan	City	27,305	Via Winnipeg
Fort Garry	R. M.	17,528	Via Winnipeg
No. Kildonan	R. M.	8,888	Via Winnipeg - E. Kildonan
Old Kildonan	R. M.	1,327	Via Winnipeg - W. Kildonan
St. Boniface	City	37,600	Aqueduct Chloramine, Fluoride
St. James	City	33,977	Via Winnipeg
			Aqueduct Chlorine, Fluoride
Transcona	City	14,248	Aqueduct Chlorine, Fluoride
Tuxedo	Town	1,627	Via Winnipeg
W. Kildonan	R. M.	20,077	Via Winnipeg
Winnipeg	City	265,429	Aqueduct Chloramine, Fluoride

Industrial Townsites and Corporation-owned Waterworks

Bissett	Ind.	Est. 900	Lake	Settling, Filter, chlorine
(San Antonio G. M.)	Town			
Lac du Bonnet	Village	820	River	Chlorine
(Water Co-Op Co.)				
Lynn Lake	Ind.	2,118	Lake	Chlorine
(Sherritt-Gordon)	Town			
Pinawa	Ind.	Est. 800	River	Filter, chlorine, fluoride
	Town			
Pine Falls	Ind.	Est. 1,200	River	Settling, filter, chlorine
(Man. Paper)	Town			
Snow Lake	Ind.	915	Lake	Chlorine
(H. B. M. & S.)				
Thompson	Ind.	3,449	River	Settling, filter, chlorine, heating
(INCO)	Town			
Flin Flon	To serve	-	Lake	Chlorine
	indust. only			

Miscellaneous Small Potable Industrial, Institutional or Corporation Water Supplies

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Source</u>	<u>Treatment</u>
Brandon Mental Hosp. (Man. Depts. of Health)	Institution	2,100	River	Settling, filter, chlorine
Churchill Harbor Board	Harbor Install'n.	500	Lake	Chlorine
Clearwater Sanat. (Sanatorium Board)	Institution	300	Lake	Nil
Falcon Beach (Prov. of Man.)	Summer Resort	-	Well	Chlorine
Ninette Sanatorium (Sanatorium Board)	Institution	350	Wells	Zeolite softening, chlorine
Pine Falls (Man. Hydro)	Power Site	Est. 60	River	Chlorine
Pointe du Bois (City Hydro El. Co.)	Power Site	Est. 300	River	Chlorine
Seven Sisters (Hydro)	Power Site	Est. 250	River	Chlorine
Selkirk Mental Hosp. (Man. Dept. of Health)	Institutions	1,600	Well	Chlorine
Whiteshell Nuclear Station	Research Station	Est. 500	River	Chlorination

Non-Potable Water Systems (flushing and/or fire protection)

Carberry	Town	1,113	Wells	Nil - fire protection only
Grandview	Town	1,057	River	Nil

NOTE: Military installations not included.

Sewerage Systems in Manitoba as of 31st December, 1964.

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Treatment</u>	<u>Final Disposal</u>
Altona	Town	2,026	Lagoons (2)	Buffalo Creek
Beausejour	Town	1,770	Lagoons (3)	Brokenhead River
Birtle	Town	846	Lagoon	Birdtail River
Boissevain	Town	1,303	Lagoon	Cherry Creek
Brandon	City	28,166	Lagoons (5)	Assinboine River
Carberry	Town	1,113	Lagoon	Dry Water Course
Carman	Town	1,930	Lagoon	Boyne River
Cartwright	Village	482	Lagoons (2)	Badger Creek
Crystal City	Town	542	Lagoons (2)	Crystal Creek
Cypress River	(R.M. Victoria)	288	Lagoons (2)	Cypress River
Dauphin	Town	7,374	Lagoons (4)	Vermillion River
Deloraine	Town	916	Lagoons (2)	Ditch
Elkhorn	Village	666	Lagoons (2)	Bosshill Creek
Erickson	Village	531	Lagoons (2)	Leda Lake
Emerson	Town	932	Lagoons (2)	Red River
Flin Flon	Town	10,546	Clarifier, Digestor	Ross Creek
Gilbert Plains	Village	849	Lagoons (2)	Valley River
Gimli	Town	1,841	Lagoons (3)	Lake Winnipeg
Gladstone	Town	944	Lagoon	Whitemud River

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Treatment</u>	<u>Final Disposal</u>
Glenboro	Village	797	Lagoon	To slough
Grandview	Town	1, 057	Nil	Valley River
Great Falls	Village	164	Septic Tank, chlorination	Winnipeg River
Gretna	Village	575	Lagoons (2)	Red River
Hamiota	Village	779	Lagoons (2)	Drainage Course
Hartney	Town	592	Lagoons (2)	Souris River
Killarney	Town	1, 729	Imhoff tank, Biofilter	Long River
* Lac du Bonnet	Village	820	Imhoff tank	Winnipeg River
MacGregor	Village	642	Lagoons (2)	Beaver Creek
Manitou	Village	863	Lagoon	Mary Jane Creek
Melita	Town	1, 038	Lagoon	Souris River
Miami	(R. M. Thompson)	350	Lagoons (2)	Tobacco Creek
Minnedosa	Town	2, 211	Imhoff Tank, Biofilter	Minnedosa River
Morden	Town	2, 793	Lagoons (3)	Plum Creek
Morris	Town	1, 370	Lagoons (2)	Red River
Neepawa	Town	3, 197	Lagoon	Whitemud River
Oak Lake	Town	430	Lagoons (2)	Assiniboine River
Pilot Mound	Village	802	Lagoons (2)	Pilot Creek
Portage la Prairie	City	12, 388	Lagoons (4)	Portage Creek
Reston	(R. M. Pipestone)	529	Lagoons (2)	Souris River
Rivercrest Local (West St. Paul)	Imp. Dist. Est.	400	Septic tank, chlorination	Red River
Rivers	Town	1, 574	Lagoon	Minnedosa River
Roblin	Town	1, 368	Lagoons (2)	Slough
Rosburn	Village	591	Lagoons (2)	Birdtail Creek
Russell	Town	1, 263	Lagoon	Slough
St. Lazare	Village	449	Lagoon	Assiniboine River
St. Pierre	Village	856	Lagoons (2)	Rat River
Ste. Rose du Lac	Village	790	Lagoons (2)	Turtle River
Selkirk	Town	8, 576	Nil	Red River
Shoal Lake	Village	774	Lagoon	Shoal Lake
Somerset	Village	596	Lagoon	Ditch
Souris	Town	1, 841	Septic Tank	Souris River
Steinbach	Town	3, 739	Lagoons (2)	Oak Creek
Swan Lake	(R. M. Lorne)	307	Lagoons (2)	Pembina River
Swan River	Town	3, 163	Act. Sludge	Swan River
The Pas	Town	4, 671	Nil	Saskatchewan River
Treherne	Village	569	Lagoons (2)	Boyne River
Virden	Town	2, 708	Imhoff Tank, Chlor.	Bosshill Creek
Winkler	Town	2, 529	Lagoons (3)	Hespeller Creek
Winnipeg Beach	Town	807	Lagoons (2)	Lake Winnipeg

* Part of Lac du Bonnet now serviced by 2 Lagoons

Municipalities Served by Metropolitan Corporation of Greater Winnipeg

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Treatment</u>	<u>Final Disposal</u>
Brooklands	Town	4,369	Interceptor	Red River
Charleswood	R. M.	6,243	System-Sewage	
East Kildonan	City	27,305	Disposal Plant located in Old Kildonan	
St. Boniface	City	37,600	Primary Treatment - Clarifiers	
St. Vital	City	27,269	Digestors - Vacuum filtration	
Transcona	City	14,248	Sludge Lagoons	
Tuxedo	Town	1,627		
West Kildonan	R. M.	20,077		
Winnipeg	City	265,429		

Members of the Metropolitan Corporation of Greater Winnipeg Not Connected with the Major Interception and Disposal System

Assiniboia	R. M.	6,088		(One District only with Sewers)
Fort Garry	R. M.	17,528		(Partial Interception- Red River)
North Kildonan	R. M.	8,888		(One District only with Sewers)
St. James	City	33,977		(Partial Interception- Red River)

Major Industrial Townsites

Bissett (San Antonio G. M.)	Ind. Town	Est. 900	Septic Tanks, Chlor.	Rice Lake (with tailings)
Flin Flon (H. B. M. & S.)	Ind. Town (To serve industry only)	-	Activated Sludge	Flin Flon Lake (with treated sludge)
Lynn Lake (Sherritt-Gordon Mining Corp.)	Ind. Town	2,118	Septic Tank, Chlor.	Lynn River
Pinawa	(L. G. D.) Ind. Town	Est. 800	Lagoon	Winnipeg River
Pine Falls (Man. Paper Co. Ltd.)	Ind. Town	Est. 1,200	Lagoons (2)	Winnipeg River
Snow Lake (H. B. M. & S.)	Ind. Town	915	Imhoff Tank	Slough adjacent to tank
Thompson (INCO)	Ind. Town	3,449	Clarifiers, Digestion, Chlor., Vacuum Filtration	Burntwood River

<u>Miscellaneous</u>	<u>Status</u>	<u>1961 Population</u>		<u>Treatment</u>	<u>Final Disposal</u>
Brandon Mental Hospital	Institution		2, 100	Nil	Assiniboine River
Churchill Harbor Board	Harbor Installations		500	Nil	Churchill River
Clearwater San.	Institution		300	Septic Tank	To muskeg area
Falcon Beach	Summer Resort			Lagoon	Muskeg Area
Ninette San.	Institution		350	Imhoff Tank, Chlor.	Pelican Lake
Pine Falls	Power Site	Est.	60	Septic Tank, Chlor.	Winnipeg River
Pointe du Bois	Power Site	Est.	300	Nil	Winnipeg River
St. Boniface San.	Institution		-	Nil	Red River
Seven Sisters	Power Site	Est.	250	Imhoff Tank, Biofilter	Winnipeg River
Selkirk Mental Hospital	Institution		1, 600	Nil	Red River
University of Manitoba	-		-	Nil	Red River
Whiteshell Nuclear Research Station		Est.	500	Lagoon	Winnipeg River

New municipal waterworks and sewerage systems are being built each year. Once installed, assistance in the actual operation of these utilities, is an essential part of the engineering program. To further this, the municipal councils are invited to send their plant operators in to Winnipeg each year, usually in March, to take part in specific courses provided for instruction in water chemistry, theory and practice of filtration, sanitary analyses of waste water and the design basis for both water conditioning and sewage treatment processes.

Waterworks and Sewage Plant Operators' Schools Attendance

<u>Year</u>	<u>1st Year</u>	<u>2nd Year</u>	<u>3rd Year</u>	<u>Refresher</u>
1955	23	-	-	-
1956	29	25	-	-
1957	18	14	19	-
1958	19	16	10	8
1959	21	22	16	8
1960	10	17	15	9
1961	15	10	16	7
1962	25	14	13	26
1963	33	25	14	32
1964	27	30	20	36

The course requires three years for completion and a certificate is issued to those operators attending. In addition, a refresher course has been developed in order to acquaint interested operators with advanced information and the latest developments.

Chemical and bacterial standards for water quality are reviewed periodically with the provincial bacteriologist and arrangements made for the periodic and frequent sampling of all municipal water supplies and as many private sources as possible. Engineers and inspectors also assist with problems of suspect private water supplies.

Further to the basic requirement of purification of water for public use, many selective requirements are now in vogue. These include water softening on a municipal scale and water fluoridation as a preventive measure in dental health. Essential analyses, control measures and operating techniques are worked out between our engineers and the local waterworks superintendents.

Communities with Fluoridated Public Water Supplies
as of 31st December, 1964.

<u>Municipality</u>	<u>Status</u>	<u>1961 Population</u>	<u>Date Started</u>
Boissevain	Town	1,303	Jan. 11, 1957
Brandon	City	28,166	March 8, 1955
Dauphin	Town	7,374	May, 1958
Gimli	Town	1,841	Dec. 23, 1963
Killarney	Town	1,729	Oct. 25, 1960
Minnedosa	Town	2,211	July 7, 1960
Neepawa	Town	3,197	July 10, 1963
Portage la Prairie	City	12,388	Jan. 13, 1958
Souris	Town	1,841	Nov. 5, 1963
Steinbach	Town	3,739	May, 1960

Municipalities Served by Metropolitan Winnipeg Water District

Assiniboia	R. M.	6,088	Approximately 7,000
Brooklands	Town	4,369	people in the Rural Muni-
Charleswood	R. M.	6,243	cipalities of Assiniboia,
E. Kildonan	City	27,305	Charleswood, and North
Fort Garry	R. M.	17,528	Kildonan do not receive
N. Kildonan	R. M.	8,888	their water supply from the
Old Kildonan	R. M.	1,327	Metropolitan Winnipeg
St. Boniface	City	37,600	Water District at this time.
St. James	City	33,977	Fluoridation program
St. Vital	R. M.	27,269	started Dec. 28, 1956.
Transcona	City	14,248	
Tuxedo	Town	1,627	
W. Kildonan	R. M.	20,077	
Winnipeg	City	265,429	

Total Manitoba population is about 921,686; thus, about 57% of the population is served with water artificially fluoridated to a level of one part per million fluoride (F).

Waste Disposal

The innocuous disposal of waste is another engineering concern. This starts with the plumbing system in the individual home or building, the collection of liquid-carried wastes materials, the treatment of sewage in either lagoon systems or standard mechanical plants, and the eventual disposal and re-stabilization in the receiving river, stream or lake. Plumbing, sewage collection and general treatment processes come under general public health engineering.

Bathing Premises

The general safety and sanitary quality of public bathing premises has assumed significant proportions in the last six years. In this respect all new swimming pools for public use require the approval of the Minister and an annual permit from the medical officer of health. The engineering staff assist in the sampling analyses of bathing waters, the formulation of design criteria for both standard and modified swimpools, and the technical problems associated with the filtration systems with which most of the standard pools are equipped.

Swimming Pools and Operator Training

Since August 5th, 1959, fifty-eight swimming pools and other bathing premises have been reviewed on the Minister's behalf. Thirteen bathing premises were approved by the Minister during 1964.

<u>Standard Pools:</u>		<u>Approval No.</u>
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1. University of Manitoba	Fort Garry	55
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Modified Standard Pools:

1. International Inn	1808 Wellington Avenue, St. James	46
2. Goulet Street Apartments	Goulet and Braemar, St. Boniface	50
3. Fountain House Apartments	300 Roslyn Road, Winnipeg	51
4. Canada House Apartment Hotel	340 Assiniboine Avenue, Winnipeg	52
5. Apartment Building	960 Winakwa Road, St. Boniface	54
6. Pinewood Place Apartments	2510 Portage Avenue, St. James	56
7. Winnipeg Canoe Club	47 Dunkirk Drive, St. Vital	57
8. Morgan Manor Apartments	1205 Grant Avenue, Winnipeg	58
9. Town of Boissevain	Boissevain, Manitoba	59

Modified Pools:

1. Altona Park	Altona, Manitoba	48
2. Ste. Anne's Tourist Camp	Ste. Anne, Manitoba	49

Wading Pools:

1. International Inn	1808 Wellington Avenue, St. James	46A
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Operator Training Courses

	<u>Date</u>	<u>Attendance</u>
1.	June 23, 1959	50
2.	April 10-13, 1961	60
3.	June 3-7, 1963	28
4.	June 25-26, 1964	45

General Services

The entire public health engineering program is carried out in concert with local health authorities, including the City of Winnipeg Health Department, the numerous Local Health Units and the Northern Health Service. In essence, the engineers provide a highly specialized back-up service to those engaged in the local supervision of preventive health measures. In addition, our engineers work very closely with staff of the Manitoba water supply board, water control and conservation branch, extension branch of agriculture and the fisheries and parks branches.

Food Control

Working cooperatively with all branches of the Department, other Departments of Government, and Industry, food control services are directed toward the safety of Manitoba's food supplies. The programs are carried out by technically qualified food and milk consultants, and include an active consultant service, direct programming of special services, and maintaining a constant vigilance on health safety aspects of production, processing, transportation, storage, and sale of all foods.

Food Control - Legislative Reference

Public Health Act Regulations: -

- Part IV, Division 1 - Food and Food Handling Establishments.
- Part IV, Division 2 - Milk and Milk Products.
- Part IV, Division 4 - Slaughterhouses.
- Part IV, Division 6 - Bottling Plants.
- Part IV, Division 7 - Eating Establishments.

Frozen Food Locker Plant Act.

Rules and Regulations under the Frozen Food Locker Plant Act.

Milk

Twenty-five (25) milk pasteurization plants operated under Ministerial Certificate during 1964 - two (2) plants discontinued operation, and one (1) new plant commenced operation. The distribution from these plants covers the entire province thereby making pasteurized milk available to all residents.

Activities include: -

- application of minimum requirements for milk pasteurization plants on a continuing basis. This includes:- location, construction, equipment and process requirements.
- continual review of Public Health Act Regulations respecting milk and milk products, and minimum requirements under these Regulations.
- meetings with consumers, producers, municipal officials and Milk Control Board.
- establishment of quality tests for raw milk, preparation of standards, and interpretation of results.
- originating, planning, and conducting dairy farm workshops for fluid milk producers.
- provision of in-service training to field staff and trainees.

- scheduling sample submissions to the Provincial Laboratories, establishing standards, interpretation of results, and monthly appraisals on all milk plants.
- consultation service to local health authorities, processors and producers.

Locations and Names of Milk Pasteurization Plants

<u>Location</u>	<u>Name of Plant</u>
Winnipeg	Silverwood Dairies Ltd.
Winnipeg	Crescent Creamery Ltd.
St. Boniface	Modern Dairies Ltd.
Winnipeg	People's Co-operative Ltd.
Winnipeg	St. Joseph's Dairy
Winnipeg	Royal Dairies
Winnipeg	Canada Safeway Ltd., Milk Department
Dauphin	Manitoba Dairy and Poultry Co-operative, Milk Plant
Flin Flon	Modern Dairies Ltd.
The Pas	Frechette's Dairy
Brandon	Manitoba Co-op. Dairies Ltd.
Portage la Prairie	Portage Creamery Co. Ltd.
Brandon	Modern Dairies Ltd.
Winkler	Winkler Co-operative Creamery
Selkirk	Lakeland Dairies
Killarney	Killarney Creamery
Souris	Souris Creamery
Selkirk	Selkirk Hospital for Mental Diseases
Ninette	Manitoba Sanatorium
Portage la Prairie	Home for Mental Defectives
Headingley	Headingley Gaol
Minnedosa	People's Co-operative Ltd.
Brandon	Hospital for Mental Diseases
Fort Garry	University Dairy
Gartmore Guernsey Farms	Dauphin

Frozen Food Locker Plants

Eighty-three (83) frozen food locker plants were issued permits under the "Frozen Food Locker Plant Act" during 1964 - a reduction of five (5) plants from the previous year. These plants continue to provide processing, freezing, and cold storage service to the general public. A change in emphasis has been noted whereby processing and freezing service has increased, and cold storage service has decreased.

Activities have included: -

- member and secretary of the Advisory Board under the "Frozen Food Locker Plant Act."
- administration of the "Frozen Food Locker Plant Act."
- meetings and discussions with plant operators and with the Manitoba Locker Association.
- assessment of plant operations with local health personnel.

Advisory Board under "The Frozen Food Locker Plant Act" (1964)

Chairman - Mr. R. S. Pearce
Member - Mr. D. McFadyen
Member - Mr. S. Meltzer
Member - Miss E. M. Collyer
Member - Mr. W. G. Saunderson
Member - Mr. A. G. McLeod

Permits Issued - Frozen Food Locker Plants

<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
88	86	88	83

Locations and Names of Frozen Food Locker Plants

<u>Location</u>	<u>Name of Plant</u>
Starbuck	Archie's Locker Plant
Neepawa	Frozen Food Centre
Morris	Morris Locker Plant
Minnedosa	J. A. Burgess and Sons
MacGregor	Lamb's Lockers and Meats
Oak River	Oak River Quick Freeze
Pilot Mound	Rockey's Processing Plant
128 Adelaide St., Winnipeg 2	North Star Cold Storage (1957) Ltd.
Carberry	W. D. McMillan Butcher and Locker Plant
Beausejour	Beausejour Locker Plant
Dauphin	Manitoba Dairy and Poultry Co-op. Ltd.
Swan River	Les' Locker Service
Boissevain	Robinson's Frozen Food Centre
Carman	Carman Frosted Foods
Cartwright	Newton's Dept. Store Ltd.
Killarney	Killarney Quick Freeze Locker Plant
36 St. Anne's Road, St. Vital, Winnipeg 8	St. Vital Locker Plant
Oakville	Oakville Meat and Locker
Grandview	Kustra's Quick Freeze Locker Plant
Steinbach	Steinbach Cold Storage Ltd.
Rivers	Rivers Quick Freeze Ltd.
Souris	Souris Quick Freeze Locker Plant
Niverville	Niverville Locker Plant
Transcona	Transcona Meats and Locker Plant
Portage la Prairie	Andrich and Co.
Lac du Bonnet	Dancyt and Son Locker Plant
Portage la Prairie	Burk's Meat Market and Locker Plant
Sanford	Sanford Co-op. Consumers Ltd.
151 Higgins Ave., Winnipeg 2	The Manitoba Cold Storage Co. Ltd.
St. Pierre	St. Pierre Locker Plant
Manitou	Manitou Frozen Food Centre
Dominion City	Frosted Food Centre
Ste. Rose du Lac	Inter Lake Meats and Supplies
Arborg	North Star Locker Plant

<u>Location</u>	<u>Name of Plant</u>
Roblin	Roblin Locker Plant
Minto	Community Market
Russell	Russell Consumers' Co-op. (1962) Ltd.
Erickson	Neilson's Meats and Groceries
Gladstone	Johnny's Cold Storage
Glenboro	Glenboro Quick Freeze Locker Plant
St. Claude	St. Claude Locker Plant
Hartney	A. N. Jopling Locker Plant
Gilbert Plains	Manitoba Dairy and Poultry Co-op. Ltd.
Benito	Hall's Food Centre
Crystal City	Crystal City Locker Plant
Binscarth	Binscarth and Districts Co-op Cold Storage Ltd.
Letellier	Quality Quick Freeze
Inglis	Inglis Locker Plant
Minitonas	Minitonas Locker Plant
Roland	Moffatt's Locker Plant
Deloraine	Maynard's Locker Plant
Stonewall	George's Locker Service
Treherne	Treherne Locker Plant
Dauphin	Central Meat and Cold Storage
Kenton	Kenton Frozen Foods
Hamiota	Hamiota Quick Freeze
Melita	Melita Quick Freeze
Somerset	Somerset Locker Plant
Eriksdale	Eriksdale Creamery and Locker Co. Ltd.
Teulon	Teulon Locker Plant
Selkirk	Russell's Food Centre
Lundar	Lundar Modern Meat Market and Locker Plant
Moosehorn	Moosehorn Locker Service
Altona	Altona Co-operative Service Ltd.
Sandy Lake	Sandy Lake Locker Plant
McCreary	McCreary Locker Plant
Brandon	Frosted Food Centre
Riverton	Dahlman Locker Plant
Shoal Lake	Shoal Lake Locker Plant
Ste. Agathe	Ste. Agathe Locker Plant
Newdale	Lawrence's Solo Store
Rosburn	Rosburn Quick Freeze
Notre Dame de Lourdes	Notre Dame Locker Plant
Birtle	Birtle Locker Plant
Elm Creek	Elm Creek Co-op. Lockers Ltd.
Reston	Reston Frozen Foods
Birch River	Birch River Locker
Gimli	Tip Top Meats and Frozen Foods
Pine River	Pine River Locker Plant
Libau	Libau Frozen Foods
Winnipegosis	Winnipegosis Locker Plant
The Pas	Bert's Quick Freeze
Ashern	Frank's Locker Plant

Meat Program

In the past non "Canada Approved" meat slaughtering, and meat processing operations consisted of small volume plants servicing local areas. These plants, specifically the slaughterhouses, were operating under local licence which required the minimum standards for small operations.

Recently there has been a trend toward expansion with a consequent larger market area. This larger market has demanded increased licence requirements for these plants.

Activities include: -

- the Interdepartmental Committee on Meat.
- negotiations with the Federal Government to extend "Canada Approved" meat inspection to domestic slaughterhouses.
- a study of the problems involved in introducing a Manitoba meat inspection program for meat processors.
- consultant and advisory service to domestic slaughterhouse operators, and meat processors in relation to constructional and operational standards.
- consultation with municipalities, local health authorities, and industry in relation to current and proposed programs.
- investigation and reporting on complaints and inquiries respecting health safety.
- consultant and advisory service on poultry and rabbit processing plants.

Slaughterhouses in Local Government Districts and Unorganized Territory

<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>
3	3	2	1

Locations and Names of Slaughterhouse Plants

<u>Location</u>	<u>Name of Plant</u>
Birch River	J. R. and G. L. Sadler

Bottling Plants

Twenty-one (21) bottling plants operated under Ministerial Permit during 1964 - a reduction of one (1) plant from the previous year. Several plants have completed extensive modernization programs.

Increased emphasis on control programs has resulted in a marked decrease in consumer complaints. Routine examination service is being continued co-operatively with local authorities.

Locations and Names of Bottling Plants

<u>Location</u>	<u>Name of Plant</u>
Winnipeg	Coca Cola Ltd.
St. James	Blackwood's Beverages Ltd.
Winnipeg	Bell Bottling Co. Ltd.
Winnipeg	Carling Breweries (Manitoba)
East Kildonan	Canada Dry Ltd.
St. James	Orange Crush Ltd.

<u>Location</u>	<u>Name of Plant</u>
Winnipeg	Arctic Drink Mfg. Co.
Winnipeg	Zero Bottling Works
Winnipeg	Dan's Beverages Ltd.
St. James	Pepsi Cola Co. of Canada Ltd.
Portage la Prairie	Portage Soda Water Works
Dauphin	Dauphin Beverages Ltd.
Dauphin	Northwest Beverages
Dauphin	Bell Bottling Co. Ltd.
Flin Flon	Arctic Beverages Ltd.
Flin Flon	Northland Beverages
Selkirk	Selkirk Beverages
Brandon	Northwest Beverages Ltd.
Brandon	Coca Cola Ltd.
Brandon	Scott Fruit Co.
Neepawa	Hip's Fruit Flavored Syrups and Ciders

Fish

The fish station and plant improvement program has been completed, and current year activity has involved: -

- advisory and consultant service to local health authorities, other government departments, and industry on health aspects.
- direct service to Lake Winnipeg producing stations, and Winnipeg area processing plants.
- investigation and reporting upon complaints and inquiries.

Food Product Analyses

A comprehensive examination and testing service on all food products has been maintained. This service is provided directly, and in consultation with other agencies including the Provincial Laboratory and the Environmental Health Laboratory.

General Activities

- a food equipment evaluation service has been provided. Special emphasis has been placed on automatic food vending units.
- assistance has been provided the food service industry in organizing, developing, and presenting training courses for food service personnel.
- formal and informal lectures, demonstrations and workshop sessions have been presented to a wide variety of groups.
- small bacteriological kits (414) have been provided Grade IX Science Classes throughout Manitoba on request.

Special Assignments

Special assignments on Boards and Committees have been a part of the Food Control Program, and include representation on: -

- Advisory Board under the "Frozen Food Locker Plant Act."
- Dairy Board of Manitoba.
- Quality Control Committee on Dairy Products.

- Special Committee on Pesticide Residue Testing.
- Advisory Committee on Education and Training of Food Service Personnel.
- Departmental Representative on Agricultural Rehabilitation Development Act.
- Emergency Supply Planning Branch.
- Western Farm Safety Conference.

Added to the foregoing, food control personnel have participated in their professional organizations. These include:- Canadian Institute of Food Technology, Agricultural Institute of Canada, and Manitoba Institute of Agrologists.

Industrial Hygiene

The Industrial Hygiene Bureau provides numerous occupational health services, and the Environmental Health Laboratory involves many specific analytical determinations pertaining not only to industrial but general environmental conditions (e.g. water treatment, waste disposal, air pollution, etc.).

General Air Pollution Survey

The Metropolitan Area of Winnipeg has been part of a National Air Sampling Network since 1957. A continuous study of dustfall, smoke, suspended particulate matter, sulphur dioxide and hydrogen sulphide is being made. The objective is to establish basic data on the present situation for use in future control problems.

Air Pollution; Specific Surveys

Many special air pollution surveys were carried out during the past year at the request of Local Health Units, to determine compliance with Provincial Air Pollution Regulations. The following surveys were carried out and reported on:

Grain plant	Bentonite plant
Milling plant	Rural creamery
H ₂ SO ₄ plant	Farm equipment plant
Oil refinery	Sugar beet plant

Studies are also underway to review existing air pollution regulations and to bring them more in line with current practise across the country.

<u>Air Pollution</u> (general survey plus 6 special surveys)	<u>Laboratory and Field Determinations</u>
Dustfall - insoluble	354
- soluble	354
- ash	708
- pH	232
Sulfur dioxide	900
Hydrogen Sulphide	78
Mercaptans	6
Total Hydrocarbons	6
Hydrogen Fluoride	10
Particulate matter	24
Microscopic examination	50

Silicosis Prevention Program

This program is concerned with the prevention of silicosis in hard rock miners, foundry workers and asbestos workers. Approximately 2,500 men are processed each year. The service is offered to the Workmen's Compensation Board and to the mining, asbestos and foundry industry.

Summary of Silicosis Survey - Manitoba 1964 (Mines, Quarries Stoneworks)

	No. of New Men Examined	No. of Old Men Examined	Total No. of Men Examined	No. of Certs. Issued	No. of Certs. Refused
<u>MINES</u>					
Hudson Bay Mining and Smelting (Flin Flon International Nickel Company (Thompson) Patrick Harrison (Thompson) San Antonio Gold Mine (Bissett) Sherritt-Gordon (Lynn Lake) Wecore Drilling	211 732 74 96 183 14	1178 539 48 74 193 4	1389 1271 122 170 376 18	1389 1271 122 170 376 18	- - - - - -
<u>STONEWORKS</u>					
Lon's Stone Works (Wpg.)	-	23	23	23	-
<u>QUARRIES</u>					
Quinn Construction	6	7	13	13	-
TOTAL	1316	2066	3382	3382	-

Summary of Silicosis Survey - Manitoba 1964 (Foundries and Asbestos Plants)

<u>FOUNDRIES</u>					
Thor Monarch Machinery Manitoba Steel (Selkirk) Griffin Steel Dominion Foundry Canadian Bronze C. P. R. Foundry Bell Foundry Bay Bronze Anthes Imperial	2 12 - 1 13 11 - 17 2 -	11 34 24 108 51 34 5 33 12 137	13 46 24 109 64 45 5 50 14 137	13 46 24 109 64 45 5 49 14 137	- - - - - - - 1 - -
<u>ASBESTOS PLANTS</u>					
Armstrong Contractors Hall's Associates Western Asbestos Hilton Insulation Canadian Insulation	1 5 17 1 2	- 8 - - -	1 13 17 1 2	1 13 17 1 2	- - - - -
TOTAL	84	457	541	540	1

Assessment of Occupational Health Hazards

Requests for services in this area are received from the public, industry, Department of Labour, Department of Agriculture, Workmen's Compensation Board, Local Health Agencies and other groups.

Main Projects include:

- Mercury surveys at seed treating plants
- Jamieson School Kit Program (500 kits/year to grade schools)
- Preparation and supplying of residual chlorine test kits to high schools. These kits are also provided for all wading pools. They are also made available to the public to ensure safety of individual water supplies.
- Annual fluoride report on eight towns in Manitoba.
- Ventilation surveys (mainly of paint spraying setups).
- Chrome plating operations and the resultant fumes and mists.
- Diesel fume surveys.
- Surveys for various solvents in air.
- Water and Sewage Works Operators School.
- Carbon Monoxide surveys (an infra-red CO Analyzer is now available to obtain continuous CO readings).
- Lead-in-air surveys.
- Welding fume surveys at various industries.
- Gas conditions in Hoarders using oil fuel and propane-fired heaters.
- Developmental work on new methods of detection and analysis.
- Study of algae control in lakes and reservoirs.
- Biological samples for arsenic determination.
- Swimming Pool Operators Conference.
- Developmental work in Gas Chromatography (identification of pesticides, herbicides, solvents, air pollutants).
- Lighting Survey
- Technical appraisal of proposed new H₂SO₄ plant.

Laboratory and Field Determinations - 1964

Analyses and Tests

Industrial Hygiene

Arsenic	30
Stippled Cell Counts	3168
Ventilation	75
Lead-in-urine, air, water, abomasal contents, liver, kidney	389
Mercury-in-air, urine, dust	63
Carbon Monoxide	100
Calibrations (thermometers, meters, etc.)	60
Iron Oxide	12
Zinc fumes	4
Flash Points	24
Solvents	36
Oxygen	15
Dust - silica	15

Hydrogen Sulphide	50
Carbon Tetrachloride	100
Trichloroethylene	25
Humidity	10
Jamieson School Kits	500
O. T. Kits for High Schools	50
Chromic Acid	6
Styrene	8
Developmental Tests on Gas Chromatograph	200
Chlorinated Hydrocarbons	15
Solvents	36
Pesticides in Animals (birds, mice)	20
Miscellaneous determinations	52

Consultations on Industrial Hygiene - 1964

<u>Industry or Agency</u>	<u>No. of Units</u>	<u>Nature of Consultation</u>
Private enquiries	24	Lead-free paints, automotive exhaust, diesel fumes, hair spray ingredients, acid fumes, odors, smoke, dust, solvents, soaps, lead, mercury, arsenic.
Governmental Agencies	96	Diesel fumes, dust from cement manufacture, vehicle exhaust, solvents, fertilizer manufacture, carbon monoxide, fluoride fumes, oxalic acid fumes, aerosol spray cans, chemicals for cold sterilization, incineration, aldrin, 2,4-D, herbicides, pesticides, mercury, lead, radiation, odors, respirators, corrosion, chemicals, ventilation, temperature, humidity.
Architects	6	Underground garage ventilation, carbon monoxide.
Printing	2	Lead, ventilation.
Petroleum	6	Caustic waste, disposal, air pollution.
Cement	2	Air pollution regulations.
Battery	2	Stippled cell counting, lead, ventilation.
Mining	4	Acid mists, dust respirators.
Foundry	6	Lead, ventilation, dust.
Poison Control Center	12	Solvents, cleaners, chemicals, paints.
Construction	16	Asbestos, gasoline fumes, oxygen, sulphur dioxide, carbon monoxide, nitrous fumes, welding, silica.
Grain	6	Dust, mercury, ventilation.
Automotive	3	Carbon monoxide, ventilation.
Foundry	6	Noise, lead, dust.
Manufacturing	20	Mercury, odors, smoke, zinc, spray paint booths, styrene, beryllium, sulphuric acid.

Plant Surveys and Visits - 1964

Industry	No. of Visits	Hazards Investigated
Foundry	12	Silica, lead, cupola discharge, X-Ray surveys.
Manufacturing	20	Ventilation, degreasers, welding, carbon monoxide, styrene, acetone, resin, sulphur dioxide, hydrogen fluoride.
Battery	8	Lead, zinc, ventilation.
Agricultural Chemicals	5	Mercury herbicides, ventilation.
Construction	8	Asbestos, gasoline fumes, oxygen, carbon monoxide, carbon dioxide, nitrous fumes.
Commercial	3	Carbon monoxide, odor, solvents.
Cement	2	Dust emission, carbon monoxide.
Quarries and Stone Works	2	Silica, asbestos.
Private residences	1	Smoke
Water Treatment Plants	7	Fluoridation setup, radiation protection survey.
Welding	3	Iron oxide, sulphur dioxide, ventilation.
Government Building	2	Lighting.
Petroleum	60	Mercaptans, sulphur dioxide, hydrogen sulphide, hydrocarbons, welding fumes.
Grain	6	Dust, mercury.
Railways	2	Carbon monoxide, diesel fumes.
Sugar Beet	15	Odors, hydrogen sulfide, pH, etc., at lime mud pond and at settling ponds, pulp emissions.
Mining	2	Carbon monoxide, dust.
Automotive	8	Carbon monoxide, ventilation, zinc casting, trichloroethylene, hydrogen fluoride.
Plastic	2	Styrene, ventilation.
Creamery	3	Odor, hydrogen sulfide.

Technical Information

The general public, industry, the professions and government agencies, continue to request technical information on a wide variety of subjects.

Thousands of items are processed each year. To supplement this public information service, staff members deliver talks on occupational health on request and arrange tours of the laboratory for various categories of students and the general public.

Lead Poisoning

Lead poisoning is still a major problem particularly in plants manufacturing batteries and in certain non-ferrous foundries. Monthly stippled cell counts are carried out on blood smears obtained from workers in these plants. Approximately 200 blood smears are read every month. This laboratory is also the only place in the province where lead-in-urine determinations are done routinely. This service is available to all hospitals and to all physicians.

Water and Sewage Analyses

This is by far the largest program in the laboratory with some 7,000 to 10,000 chemical analyses completed annually. Such analyses as fluoride, alkalinity, nitrate, hardness, chloride, iron, sodium and potassium are run continuously. This service is provided to government public health engineers, municipalities, industry and the public. Test reagents are also distributed to all plants in the Province.

<u>Water and Wastes</u>	<u>Laboratory and Field Determinations</u>
Mineral analyses	9000
Biochemical Oxygen demand	900
Fluorides	913
Microscopic examinations	150
Detergents and Surfactants	106
Arsenic	30
Copper	157
Zinc	19
Lead	135
Phenols	10
Oil	8
Pesticides	50
Nickel	10
Solids	26

Fluoride Control

Nearly 1,000 samples are tested every year. The objective is to control fluoridation within well-defined limits. The service is offered to all municipal and health agencies.

Nitrate Poisoning (water)

Test kits are supplied to approximately 100 hospitals and health agencies for the protection of infant health.

Organic Mercury Poisoning

Here, to discover potential health hazards from exposure to organic mercury and to develop controls, an overall preliminary survey of the seed treating industry was recently completed. Results obtained have warranted a specialized spot survey on four typical plants. Tests for mercury-in-air, urine and dust are underway and recommended control measures will be drawn up. There are also three plants where continuous mercury-in-air surveys are carried out. Plant physicians at two of these plants have requested mercury-in-urine analyses on a routine basis (pre-employment, half way through the season, and at the end of the seed treating season).

Gas Chromatography

A new laboratory tool, the Gas Chromatograph, has proved extremely versatile. Analyses for solvents, detergents, pesticides in water, and certain air pollutants are now being carried out on this equipment. The service is available to municipal agencies and industry. Increased uses of pesticides whose effects are not completely

known inspired this program. Pesticide determinations are presently being undertaken on river and lake samples.

Public Health Inspection

This section has a field staff of eight public health inspectors located at Brandon, Manitou and Winnipeg. They serve 43 rural municipalities and the towns and villages included in areas not covered by local health units and the unorganized territory south of the 53rd parallel.

Broad routine public health sanitation programs and special projects are carried out each year. Activities over the past year have involved:

Fish Station Improvement Program

Surveys of fish stations in 1960 led to a program designed to effect improvements over a three-year period.

In 1964 over forty fish stations on Lake Winnipeg were inspected to ascertain the sanitation measures practiced at each station. There were only five stations that did not meet with accepted standards.

Fish stations on Lake Manitoba have shown considerable improvement and all merit health approval with only minor recommendations. Operators of stations north of The Pas require further attention and will benefit from an educational program now underway.

Waste Disposal

Collection and disposal of waste material in unorganized territory has not been satisfactory for some years. This year a sanitary survey of each community in the Inter-Lake area was carried out and recommendations made regarding location and maintenance of waste disposal grounds. Lack of funds to implement recommendations has been a stumbling block, but certain financial arrangements have been worked out, and effective with the tax year 1965, resident administrators will be empowered to purchase lands for waste disposal grounds and establish refuse collection services in small communities.

In small towns, a considerable amount of work has been done to improve the appearance of waste disposal grounds and reduce nuisance complaints. Some rural municipalities have contracted with pest control operators to routinely visit refuse grounds and institute rodent control programs.

Disposal of manure from piggeries remains a perplexing problem. Some operators are using the lagoon system for disposal and this system creates unpleasant odours. Negotiations are now underway with some municipal councils with a view to zoning piggeries and similar industries.

Sanitation of Premises

	Office Interviews	Field Inspections
Tourist Camps	6	35
Summer Camps	3	20
Construction Camps	4	8
Hotels, Motels and Legion Halls	27	101
Hospital Sites	6	29

	<u>Office Interviews</u>	<u>Field Inspections</u>
Schools	25	47
Complaints	57	178
Barber shops	4	32
Institutions	6	21
Community Rat Control Effort	3	10
Rat eradication - dwellings	5	8
Insect Eradication	6	24
Plumbing systems	68	766
Septic tanks and disposal fields	86	517
Municipal treatment plant	2	29
Lagoons	6	57

Housing

Although slum areas do not exist in villages and towns, there are many older homes that present a neglected appearance and need repair.

Although not necessarily a health hazard, these buildings tend to adversely affect a neighborhood.

A further problem is presented by the increasing use of trailer homes as permanent residences. Trailer courts that are not operated or maintained in a sanitary manner are a threat to the health of the occupants and of residents in adjoining areas.

Local authorities are loath to take action even when building by-laws are not complied with. The average trailer home does not provide the floor space, ceiling height, windows, plumbing or cubic air space required for permanent homes. Although some cities and towns prohibit the locating of trailers within the city limits, this is not resolving the health problem. Some definite standards in respect to use and occupancy are needed.

Plumbing and Drainage

Inspection of private water and sewerage systems continues to absorb a major part of the time of field staff. Requests from home owners for advice and assistance in the construction of sewage disposal systems and the installation of plumbing increase each year. There are many variables to be considered in these installations and if the construction is being done by inexperienced persons, repeated visits become necessary. During the last 20 years supervision has been provided for the installation of thousands of septic tanks and disposal fields.

Water Supplies

Samples from municipal supplies are collected on a routine basis and sent to the laboratory for bacteriological examination. The number of requests for sampling of private supplies was similar to other years. The majority of samples indicate a safe water supply but where pollution is shown, advice on treatment of water is provided.

Water Supplies

	<u>Office Interviews</u>	<u>Field Inspections</u>
Wells	54	378
Surface Waters	10	51
Municipal Supplies	8	239
Chlorinating Appliances	9	39
Samples: Bacteriological	21	1251
Samples: Chemical	9	287
Field Tests Nitrate	29	38
Field Tests O. T.		70
Field Tests Other Sources		88

Staff Training

In-service training of staff was continued in 1964 with a five-day institute in the spring and a two-day workshop in November.

These in-service training sessions help to establish a uniform approach to problems in the field and upgrade the standard of performance of inspectors.

Organized by this section, a formal course of training for six student public health inspectors commenced in October. Staff from all branches of the department is contributing to this course which will extend until September, 1965. The Federal Government is financing this project which leads to certification by the Canadian Public Health Association. Students enrolled will eventually fill vacant positions in health units.

Provincial Sanitary Control Commission

"The Pollution of Waters Prevention Act" is the enabling statute governing the control of surface water pollution in the Province of Manitoba. The Provincial Sanitary Control Commission functions under the authority of this Act and the Minister of Health.

The members of the Commission are Mr. W. J. Johnston, Q.C., Mr. N. Mudry and Mr. L. A. Kay (chairman). The technical staff includes one public health engineer, Mr. A. B. Sparling, who also acts as secretary, and one chemist, Mr. A. A. E. Sorba. A term assistant is usually hired for part of the year.

The commission is responsible to the Minister of Health for the continuing surveillance of surface water courses, the extent and nature of allowable dilution of waste effluent and the issuance of licences to use the rivers, streams and lakes for this purpose.

Much of the field work is done in conjunction with the Fisheries Branch since detrimental pollution could also affect the important fish resources of the Province. This is a continuing arrangement of mutual advantage.

Local offensive conditions due to the discharge of untreated sewage or waste are subject to control by various regulations under "The Public Health Act". The provisions of "The Pollution of Waters Prevention Act" provide the necessary restrictive and corrective measures for large scale or continuing but controlled pollution.

The massive construction program for sewage treatment in the Metropolitan community of Greater Winnipeg is progressing satisfactorily. An international investigation of the sanitary quality of the Red River on both sides of the border has been established and work will commence in 1965.

During 1964, a total of twelve licences were issued by the Commission. As required by statute, a separate report by the Commission is made to the Minister of Health for tabling in the Legislature.

Licences Issued by the Provincial Sanitary Control Commission - 1964

1. Village of Rosburn	to Birdtail Creek
2. Rural Municipality of Strathclair	to Salt Lake
3. City of Brandon	to the Assiniboine River
4. Rural Municipality of Harrison	to surface drainage courses
5. Town of Melita	to the Souris River
6. Rural Municipality of Miniota	to the Assiniboine River
7. Town of Roblin	to West Goose Lake
8. Red River School Division No. 17	to the Red River
9. St. John's Cathedral Boys' School	to the Red River
10. The University of Manitoba, Glenlea	to the Red River
11. Mr. T. Robinson, Boissevain	to Cherry Creek
12. Interprovincial Pipeline Company, Gretna	to surface drainage courses

PREVENTIVE MEDICAL SERVICES

The general work of Preventive Medical Services is aimed at preventing disease, promoting health and making treatment available under certain conditions. To this end the Section acts as the centre for the collection of statistics on notifiable communicable diseases so that early and rapid action can be taken in the case of an outbreak. It is also a distribution centre for the free supply of certain vaccines which produce active immunity to diseases. These include antitoxins and sera for the treatment of disease; silver nitrate to prevent ophthalmia; penicillin and sulpha to prevent rheumatic cardiac disease and drugs for the treatment of diabetes, venereal disease and other communicable diseases. Under special circumstances, drugs required as a life saving measure or as a long term continuing necessity are supplied.

This section arranges and provides transportation to and from hospitals or sanatoria for indigent patients who are suffering from tuberculosis.

Personnel act as consultants in communicable disease control and Venereal Disease Control, for the medical profession, health units and others. Up-to-date information of contagious disease elsewhere is collected and advice given to travellers about foreign immunization requirements. The section also acts as custodian of the Health Department stamp used to authenticate vaccination documents required for international travel.

The Section of Preventive Medical Services consists of three distinct divisions:

- (1) General Epidemiology
- (2) Central Tuberculosis Registry
- (3) Venereal Disease Control

I - EPIDEMIOLOGY AND CONTROL OF EPIDEMICS

On the whole, the incidence of communicable diseases in the province of Manitoba has been low, with the exception of the venereal diseases. Otherwise the most frequently reported infections are Infectious Hepatitis and Dysentery. A number of small outbreaks have been reported during the year.

Enteric Fevers. Typhoid and Paratyphoid are serious diseases which have in the past been responsible for explosive outbreaks. Seven cases of Typhoid, one Typhoid carrier and one case of Paratyphoid were reported during the current year in Manitoba, and in each instance the section, along with the staff of local Health Units, has adopted very strenuous measures to prevent any spread from these foci of infection. Chronic Typhoid carriers constitute a problem and a known hazard and have to be carefully supervised by the department.

Diphtheria. Fortunately, outbreaks of this disease were much less than during 1963. During the year two cases were reported and one of these, a child of three, died as a result of the infection. Seven Diphtheria carriers were discovered as a result of an intensive search by Health personnel and these all received treatment to prevent them spreading the disease to others.

Brucellosis. Undulant Fever has been a problem in this province for a number of years and recently has affected chiefly employees in packing plants, rather than farmers. The Federal Department of Agriculture completed the

first phase of their Brucellosis eradication program in cattle during 1963 and since then the incidence of Brucellosis has continued to decline and no longer shows any preponderance in packing house workers. Only eight cases have been reported in 1964.

Diarrhoeal Diseases. Dysentery, Food Poisoning and Diarrhoea of the newborn continue to be quite prevalent. Three hundred and seventy-one cases of Dysentery were reported. This is an indication for continued vigilance in the provision of safe water supplies and for the supervision of food handlers.

Infectious Hepatitis. Apart from venereal diseases, Infectious Hepatitis remains the most frequently reported communicable disease in this province, despite the widespread use of Gamma Globulin for household contacts. The incidence this year is slightly less than in 1963 but shows a very considerable reduction from the 1961 figure.

Poliomyelitis - Paralytic. Once again, no cases of paralytic poliomyelitis have occurred in Manitoba during the past year. This is almost certainly the result of the extensive immunization campaigns which have been conducted during the past few years.

Western Equine Encephalitis. This disease has been epidemic in Manitoba in the past. It is a disease which normally affects wild birds and is transferred from them by a mosquito (*Culex Tarsalis*) to horses and man. Considerable interest in this disease has been taken in our neighboring province of Saskatchewan, because it is anticipated that the completion of the Saskatchewan River Dam may produce favorable conditions for increased breeding of the mosquito vector. During the year a search was made in Manitoba for evidence of infection in ducks, mosquitos, other animals and humans. The findings in ducks and mosquitos were essentially negative. Quite a number of horses were diagnosed as having Western Equine Encephalitis but only one doubtful human case was brought to light.

Psittacosis. This is a comparatively rare disease which spreads to man from budgerigars, pigeons, parrots and other birds. During the year five cases were reported and in each case, contact with infected birds was established and the necessary action taken to prevent further infection by treating or destroying the birds involved.

Tetanus. This is a frequently fatal infection which results from the contamination of a wound with dirt or soil containing the tetanus germs. The department attempts to prevent this by maintaining an immune status in the population by the use of active immunization with tetanus toxoid. Most of our pre-school and school children are adequately immunized but unfortunately, the adult population is not so well covered. During 1964 there were three cases of Tetanus. These all occurred in people who were injured while handling agricultural implements. Two of them died, despite strenuous treatment.

Other Virus Infections. Once again during the year there have been several sharp outbreaks of the usual mild illnesses due to viruses, causing symptoms of the respiratory system and the gastrointestinal system. Most prevalent as a cause of these have been the adenoviruses, ECHO virus and Cocksackie virus. Whooping Cough, Measles and Mumps have been quite prevalent. Encephalitis following attacks of Measles and Mumps have been reported more frequently than in the past.

COMMUNICABLE DISEASE AND CANCER REPORTED CASES AND DEATHS

DISEASE	<u>CASES</u>		<u>DEATHS</u>		DEATH RATE PER 100,000 <u>POPULATION</u>	
	1963	1964	1963	1964	1963	1964
Brucellosis (Undulant Fever)	12	8	-	-	-	-
Diarrhoea of the Newborn - epidemic	16 (1)	17 (1)	1 (1)	1 (1)	0.1	0.1
Diphtheria Cases	24	2	3	2	0.3	0.2
Diphtheria Carriers	10	7 (3)	-	-	-	-
Dysentery:	396 (10)	371 (26)	-	1	-	0.1
(a) Amoebic	-	-	-	-	-	-
(b) Bacillary	60 (1)	42 (2)	-	1	-	0.1
(c) Other and Unspecified	336 (9)	329 (24)	-	-	-	-
Encephalitis	8	21	-	1 (1)	-	0.1
(a) Infectious	8	1 (1)	-	1 (1)	-	0.1
(b) Post Infectious	-	20	-	-	-	-
(1) Measles	-	12	-	-	-	-
(2) Mumps	-	8	-	-	-	-
Food Poisoning	16	83	-	1	-	0.1
(a) Staphylococcus Intoxication	9	17	-	-	-	-
(b) Salmonella	3	7	-	-	-	-
(c) Unspecified	4 (1)	59	-	1	-	0.1
Hepatitis Infections (including Serum Hepatitis)	761 (17)	684 (48)	4	3 (2)	0.4	0.3
Meningitis viral or aseptic	54 (1)	36	-	-	-	-
(a) Due to polio virus	-	-	-	-	-	-
(b) Due to Coxsackie virus	-	-	-	-	-	-
(c) Due to ECHO virus	1	-	-	-	-	-
(d) Other and unspecified	53 (1)	36	-	-	-	-
Meningococcal infections	2 (2)	7	4	2	0.4	0.2
Pemphigus Neonatorum	-	-	-	-	-	-
Pertussis (Whooping Cough)	76 (10)	33 (10)	2 (2)	1 (1)	0.2	0.1
Polio myelitis - paralytic	-	-	-	-	-	-
Psittacosis and Ornithosis	2	5	-	-	-	-
Scarlet Fever and Streptococcae Sore Throat	118 (1)	93	-	-	-	-
Tetanus	-	3	-	1	-	0.1
Typhoid and Paratyphoid Fever	6 (4)	7 (1)	-	-	-	-
Typhoid Carrier	-	2	-	-	-	-
Cancer	3122	3100	1431 (12)	1425 (15)	150.6	147.3

Population 1963 - 950,000

Population 1964 - 958,000

Figures in Brackets () - Treaty Indians

Vaccines and Immunizing Agents

The section strongly advocates routine community wide immunization against Smallpox, Diphtheria, Whooping Cough, Tetanus and Poliomyelitis in childhood, with appropriate boosters during school life and in adults. Biologicals for this purpose are distributed, without charge, for the use of local health units and private physicians. Diphtheria, Pertussis, Tetanus and Salk Polio Vaccine, were used in smaller quantities during 1964. The distribution of Smallpox Vaccine indicates that the immune status of our population against this disease leaves much to be desired. Typhoid and Paratyphoid antigens are made available in certain circumstances. Vaccination against Yellow Fever is made available by the Federal Government.

A stock of vaccine and antiserum for Rabies is stored and made available for persons bitten by wild or rabid animals. Although no human case of Rabies occurred in the province, it was necessary to give 102 persons treatment with vaccines to prevent its occurrence. This is about three times as much as was used the previous year. Diagnosis of Rabies in animals is quite common and laboratory tests confirmed its existence this year, in two cats, 79 skunks, 18 bovine, six dogs, two pigs and one horse. In addition, four dogs, two cats, seven bovine, one pig and one skunk were found to be rabid and had been in contact with humans.

Biologics Distributed Free in Manitoba - 1963 and 1964

	<u>1963</u>	<u>1964</u>
Diphtheria, Pertussis, Tetanus and Polio Combined (cc)	141,720	108,867
Diphtheria, Pertussis and Tetanus Toxoid Combined (cc)	5,102	2,437
Diphtheria, Tetanus and Polio Combined (cc)	50,540	29,806
Diphtheria, Toxoid and Tetanus Toxoid Combined (cc)	28,668	10,119
Tetanus and Polio Combined (cc)	9,300	7,957
Diphtheria Toxoid (cc)	5,434	3,413
Pertussis Vaccine (cc)	621	470
Poliomyelitis Vaccine (Salk) parenteral (cc)	32,210	25,626
Poliomyelitis Vaccine (Sabin) oral (doses)	-	611,517
Tetanus Toxoid (cc)	13,995	15,916
Typhoid Paratyphoid Vaccine (cc)	6,469	6,147
Typhoid Paratyphoid Vaccine and Tetanus Toxoid (cc)	10,541	10,125
Smallpox Vaccine (Points)	98,576	91,815
Rabies Vaccine (Courses)	48	102
Gamma Globulin (cc)	15,355	19,179
Diphtheria Antitoxin - Prophylactic (vials)	65	42
- Treatment (vials)	56	31
Tetanus Antitoxin - Prophylactic (vials)	4,464	3,337
- Treatment (vials)	46	96
Scarlet Fever - Prophylactic (vials)	13	9
Antitoxin - Treatment (vials)	6	5
Schick Test (25 person packages)	711	634
Silver Nitrate (ampoules)	11,390	15,632

Sabin Campaign

On April 10, 1964, Manitoba commenced its second mass Sabin Oral Polio Vaccine Campaign. This was a co-operative effort of all personnel in the Health Department.

The campaign was directed primarily at infants over the age of six months, preschool children, school children and young adults. In total, 611,517 persons received the Sabin Vaccine, administered on a cube of sugar. Generally speaking, about 95% of school children received the vaccine. There was also a high proportion of preschool children attending the clinics.

It is estimated that 45% of all adults over the age of twenty have now received two doses of Sabin Vaccine. About 90% of preschool children have had at least one dose of Sabin in addition to their Salk shots.

Only one report was received of a significant paralytic phenomenon arising as a sequel to the vaccination and in this case the symptoms proved to be transient and complete recovery resulted within a short time.

Plans for the future envisage the incorporation of Sabin Vaccine in the routine schedules of immunization used for infants and school children. It will also probably be made available for distribution through private practitioners.

Measles Vaccine

Measles Vaccine has been used extensively by private physicians during the year. The Minister's Expert Advisory Committee on immunization procedures have constantly reviewed its use on a community wide basis but so far have not seen fit to recommend it for use in this way, nor have they recommended that it should be placed on the free list.

Antitoxins

Antitoxin is made available for the treatment and prevention of the disease in those exposed to Tetanus, Diphtheria and Scarlet Fever. Because of the risk of dangerous side effects, none of these preparations are as satisfactory as adequate active immunization. This applies particularly to Tetanus Antitoxin and the section has been promoting active immunization of all age groups with Tetanus Toxoid so that the antitoxin will not have to be used. A new type of antitoxin made from human blood serum in the form of a gamma globulin became available during the year. This does not have the potentially dangerous side effects of the ordinary horse serum antitoxin. Supplies are available through hospitals and commercial channels. This section provides it free for indigents attending at doctors' offices.

Another new drug introduced during the year was Marboran (N-Methyl-Isatin-B-Thio-Semicarbasone). This drug has been found valuable in preventing Smallpox in persons who have come in contact with this disease. A stock pile has been obtained and is being maintained at the Winnipeg International Airport.

Gamma Globulin

The section continues to provide free Gamma Globulin for preventive purposes. Groups covered under this scheme are household contacts of cases of Infectious Hepatitis, pregnant women during the first three months of pregnancy, where contact with German Measles may give rise to abnormality in the unborn child, and for special cases in hospitals and institutions. Gamma Globulin for treatment purposes remains the responsibility of the Canadian Red Cross Society. Increasingly large quantities of Gamma Globulin are being used.

Prevention of Cardiac Diseases due to Rheumatic Fever

Repeated attacks of Rheumatic Fever are well known to carry an increasing risk of affecting the heart. These attacks can be prevented by the continuous use of an antibiotic or chemotherapeutic agent which will prevent infection with the Haemolytic Streptococcus which initiates the Rheumatic Fever. Preventive Medical Services makes penicillin or sulpha tablets, as well as a preparation of a long acting injectable penicillin available for this purpose. Applications from family physicians are scrutinized by an expert committee to ensure accuracy of diagnosis. The patients are followed up by the staff of the local health units to make sure that the prophylactic treatment is carried out regularly and in accordance with the physician's instructions. The cost is shared equally by the province and the municipality in which the patient has legal residence. One thousand, five hundred and forty-three patients are currently receiving this treatment.

Drugs to Prevent Rheumatic Heart Disease

Patients accepted under program to end of 1963	-	1,596
Patients accepted under program to end of 1964	-	1,823
Patients on active list at end of 1964	-	1,543

Drugs Provided

Drug	Penicillin G. 0.5 Grams	Sulphadiazine 0.5 Grams
Bottles of 100 tablets	3,730	158

Treatment of Diabetes

Anti-diabetic drugs are made available free to patients where the municipality of legal residence or the Welfare Department certifies that they are unable to purchase the drugs out of their own resources. The cost is shared on a fifty-fifty basis between the provinces and the municipality.

Patients eligible for Medicare are excluded since they are entirely a Welfare Department responsibility. Drugs are supplied in accordance with the prescription of the legally qualified physician in attendance. All the injectable insulins are made available, as well as the newer hypoglycaemic agents taken by mouth. There are currently about 631 persons who take advantage of this service. This represents a reduction from previous years, which is due largely to the fact that many of the older patients can now receive their drugs free under the Medicare scheme.

Drugs Provided

Type	Toronto Insulin			PZ Insulin		NPH Insulin		Lente Insulin		Globin Insulin	
Strength	10	40	80	40	80	40	80	40	80	40	80
Vials	10	1007	400	1996	990	2386	1712	922	1145	122	55

Oral Hypoglycaemic Tablets

Drug	Tolbutamide 0.5 G.	Diabinese 250 Mgm.	D. B. I. 25-50 Mgm.	Dimelor 0.5. G.
No. of Tablets	125,300	45,400	13,100	2,400

Special Drugs of a Life Saving Nature

This program has been in operation since 1958. In recent years policy has changed and under the scheme we now include cases where the life-saving drugs are required as a long term continuing necessity extending over months or years and where there is financial need. The financial need is assessed on the basis of a statement by the municipal authorities that the patient is unable to bear the cost of the drugs without creating undue hardship and that the municipality itself will be prepared to contribute fifty percent of the cost. The medical need is assessed on the basis of a certificate from the attending physician, usually supported by a report from a recognized specialist in the appropriate field. In certain circumstances the entire cost is borne by the province. This program is designed to relieve hardship amongst those patients who are not eligible for Medicare but would become indigent only as the result of the high cost of the drugs concerned. It fills a great need which becomes more obvious as knowledge of the scheme becomes available to doctors. During 1964 the number of patients benefitting under the scheme has almost doubled once again and there are now 67 such cases, as compared with 37 during 1963.

Much of this can be accounted for by the increased number of cases of Cystic Fibrosis. This is a disease in which, as a result of a deficiency in enzymes with which the patient is born, they become liable to repeated infections and serious ill health. Life long replacement and antibiotic therapy are required. Special arrangements have been made with the Children's Hospital for these cases to be assessed and the cost of the drugs is borne entirely by Preventive Medical Services. At the present time, 34 cases of Cystic Fibrosis are being looked after.

There are six cases of Phenylketonuria - another disease in which the provision of a special diet prevents the development of mental deficiency and the need for life long incarceration in a mental institution. The remaining 27 patients are suffering from miscellaneous conditions, in many of which prolonged use of expensive steroid drugs is required.

II - TUBERCULOSIS CONTROL

The actual treatment of Tuberculosis and much of the work in prevention is carried out by the Sanatorium Board of Manitoba, which is a voluntary organization, largely supported by government funds. Preventive Medical Services is responsible for the administration of interprovincial agreements with the provinces of British Columbia, Alberta, Saskatchewan, Ontario and Quebec, for the care of patients suffering from Tuberculosis. Under this agreement, a resident of Manitoba who moves to any of the above provinces and becomes ill within the first year, can be treated for his disease in their sanatoria and maintenance is paid by our province. Similar reciprocal arrangements apply where the situation is reversed.

Central Tuberculosis Registry

The main function of this bureau is to maintain a register of all the reported cases of Tuberculosis and a list of all persons who have come in contact with cases of open tuberculosis. They work in very close co-operation with the Sanatorium Board of Manitoba and with the local health units. The registry

Central Tuberculosis Registry

1963

1964

Reported as

Reported as

o

Whites	Treaty Indians	Eskimos	TOTAL	Treaty			TOTAL
				Whites	Indians	Eskimos	
5,140	1,179	608	6,927	5,227	1,864	637	7,728 *
5,033	1,115	551	6,699	5,129	1,792	576	7,497
107	64	57	228	98	72	61	231
256	78		334	197	75		272
227	58		258	170	59		229
29	20		49	27	16		43
218	68		286	164	65		229
176	60		236	132	59		191
9	2		11	4	-		4
33	6		39 (4.1 per 100,000)	20	8		28 (2. per 100,000)

Total tuberculous patients carried in Registry file December 31

New cases of tuberculosis diagnosed in Manitoba

Re-infection Type

Primary Type

Of these, the number of active cases

Number admitted to Sanatoria

New diagnoses counted upon notification of death

Deaths from Tuberculosis

o Treaty Indians and Eskimos are wards of the Dominion Government.

* The increase in the number of persons carried in the Registry File is due to the fact that all persons who have had active tuberculosis are now carried for an indefinite period of time.

o 1964 figures are preliminary.

ensures that patients are properly followed up and brought in for examination and if necessary for treatment at regular intervals. The regular supervision of contacts is also provided for. The registry collects and tabulates statistical information in connection with tuberculosis in Manitoba.

Tuberculosis as the cause of death continues to be less of a threat to life. The 1964 mortality rate from tuberculosis remains at a new low. The morbidity rate though lower than five years ago, indicates that tuberculosis continues to be a threat to the health of people of all ages. Actually there has been a considerable decrease in the number of persons who are found to have active tuberculosis.

To date, there has been no let up of case finding facilities offered to the public. Community and Industrial surveys are scheduled so that everyone in Manitoba is given an opportunity to have a tuberculin test or chest x-ray at regular intervals. An attempt is also made to contact ex-patients to bring their attention to the importance of annual medical review.

Also a Registry of all persons known to have a positive reaction to the tuberculin test is maintained. Those persons whose reaction is 4+ are encouraged to have a repeat x-ray in six months followed by annual chest x-rays.

III - VENEREAL DISEASE CONTROL

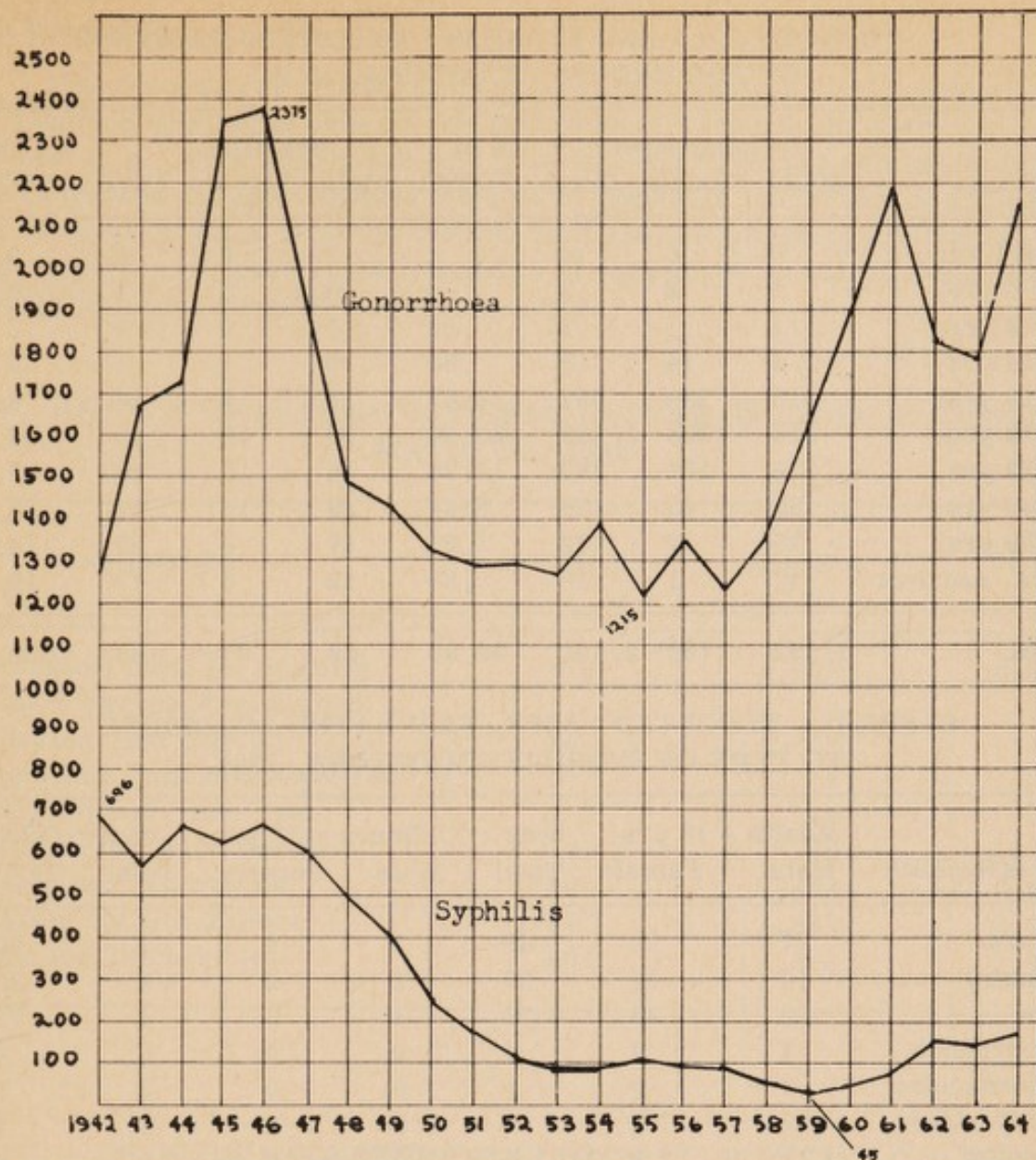
Venereal Disease Control implies prevention of the spread of venereal diseases. Basically this is accomplished through administration of the regulations under the Public Health Act, requiring physicians to notify the Director of Venereal Disease Control of cases of venereal disease. Notification should include information about all contacts of the initial case. The Director, through staff in the Norquay Building, organizes the location, examination and treatment, if necessary, of these contacts. Location of contacts is carried out in Metro through three full-time Public Health Nurses attached to the Venereal Disease Clinic and in Health Unit areas through Health Unit staff. Examinations and treatments are carried out by practicing physicians at no cost to the patient, where payment would be a hardship, or at the Government Venereal Disease Clinic at St. Boniface.

The essentials of the program are: -

- (a) Prompt notification.
- (b) Complete information as to case and contacts.
- (c) Rapid location of contacts.
- (d) Good administrative follow-up to ensure that contacts were actually located, examined and treated.
- (e) Readily available diagnostic and treatment facilities subsidized so as to ensure that they are available to anyone in need of them.

Trend in 1964

Figures show a continuing high incidence in Manitoba. This is part of a nation-wide, continent-wide and world-wide development noted since the late 1950's. However, incidence in 1964 is still below the previous Manitoba peaks of 696 cases of Syphilis in 1942 and 2,375 cases of Gonorrhoea in 1946, despite an increase in population since then.



GONORRHOEA AND SYPHILIS - REPORTED CASES, ADULT BY SEX AND MARITAL STATUS, CHILDREN BY SEX - MANITOBA, 1964.

Adults (18 years and over)

Status	Gonorrhoea			Syphilis		
	Male	Female	Total	Male	Female	Total
Married	265	197	462	23	22	45
Single	940	352	1,292	57	22	79
Widowed	9	8	17	6	2	8
Divorced or Separated	108	127	235	10	18	28
TOTAL	1,322	684	2,006	96	64	160
Children (17 and under)	35	100	135	3	5	8
GRAND TOTAL	1,357	784	2,141	99	69	168

GONORRHOEA AND SYPHILIS - REPORTED CASES
BY AGE GROUPS, MANITOBA, 1964.

Age Group	Gonorrhoea			% of TOTAL	Syphilis			% of TOTAL
	Male	Female	Total		Male	Female	Total	
Under 1 yr.	0	0	0	0	0	0	0	0
1 - 4 yrs.	1	2	3	0.14	0	0	0	0
5 - 9 yrs.	1	1	2	.09	0	0	0	0
10 - 14 yrs.	4	14	18	.85	0	1	1	0.6
15 - 19 yrs.	119	239	357	16.67	7	7	14	8.3
20 - 29 yrs.	815	368	1,183	55.26	30	18	48	28.6
30 - 39 yrs.	276	104	380	17.74	14	15	29	17.3
40 - 49 yrs.	95	43	138	6.44	19	15	34	20.2
50 - 59 yrs.	25	17	42	1.96	17	8	25	14.9
60 yrs. and over	17	1	18	.85	12	5	17	10.1
TOTAL	1,352	789	2,141	99.98	99	69	168	100.00

SYPHILIS - REPORTED CASES, TABULATED ACCORDING
TO TYPE OF SYPHILIS - MANITOBA, 1964.

Type of Syphilis	Adults - 18 yrs. over			Children - 17 yrs. under			GRAND TOTAL
	Male	Female	Total	Male	Female	Total	
Primary	37	12	49	1	0	1	50
Secondary	16	14	30	1	2	3	33
Latent	36	35	71	1	3	4	75
Neurosyphilis	4	0	4	0	0	0	4
Cardiovascular	1	0	1	0	0	0	1
Other Tertiary	1	0	1	0	0	0	1
Congenital	2	2	4	0	0	0	4
TOTAL	97	63	160	3	5	8	168

SYPHILIS AND GONORRHOEA, REPORTED CASES MANITOBA 1955 - 1964

Syphilis	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Primary	14	12	21	8	7	8	18	48	42	50
Secondary	1	5	9	2	2	8	5	12	21	33
Other	86	76	64	48	36	32	48	85	87	85
TOTAL	101	93	94	58	45	48	71	145	150	168
Gonorrhoea	1,215	1,348	1,226	1,362	1,636	1,892	2,178	1,817	1,786	2,141

The Venereal Disease Clinic

This government-sponsored diagnostic and treatment clinic, located in the St. Boniface Hospital mainly serves Metropolitan Winnipeg and rural areas adjacent to it. Free clinics are held morning, afternoon and evening on Mondays and Thursdays and most modern methods of diagnosis and treatment are used. The Medical Director is on the hospital staff and has admitting privileges. There is a continuing increase in the attendance of patients at the clinic, reflecting the overall increase in incidence in the province.

RESULTS OF LABORATORY EXAMINATIONS ON CLINIC PATIENTS MANITOBA, 1964

Examinations	Positive	Negative	TOTAL
Serological tests for Syphilis	376	4,439	4,815
Reiter's Protein Complement			
Fixation Test (RPCF)	337	37	374
Treponema Immobilization Test	7	6	13
Cerebrospinal Fluid Test	3	45	48
Darkfield for Spirochaetes	21	46	67
Smears for Gonorrhoea	860	1,439	2,299
Cultures for Gonorrhoea	611	1,454	2,065
Swabs for Trichomonas	301	1,106	1,407

MANITOBA GOVERNMENT CLINIC - ST. BONIFACE O.P.D. NEW PATIENTS ADMITTED 1955 - 1964

New Patients Admitted	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964
Syphilis	30	30	35	16	19	12	32	73	80	100
Gonorrhoea	502	587	513	548	775	920	943	814	820	999
Non-Gon.)										
Urethritis and)	614	465	185	132	141	131	122	105	114	181
Miscellaneous			240	298	426	486	552	614	866	1,123
No Pathological Condition	556	525	447	621	784	708	675	788	1,143	965
TOTAL	1,702	1,607	1,420	1,615	2,145	2,257	2,324	2,394	3,023	3,368

Uncooperative patients, or those charged by the Morality Squad of Winnipeg City, are examined, on an order from the Minister of Health, usually at the Venereal Disease Clinic. Treatment of these and other offenders may be continued in penal institutions, through the Attorney-General's Department.

DETENTION HOMES AND GAOLS

Patients treated in detention homes and gaols were as follows:

Gonorrhoea	163
Syphilis	31
Non-Specific Infection	2
	196

Diagnosis and Treatment in Rural Areas

Equipment for all diagnostic tests is provided to physicians, with mailing containers for transmission to the Provincial Laboratory, where tests are done without charge. Free drugs for notified cases are provided outside Metropolitan Winnipeg. Physicians fees are payable by the Province, if the patient is unable to pay.

Records and Administration

Records of notifications are maintained in the Norquay Building. Information for the location of contacts is sent to the Venereal Disease Clinic, Public Health Nursing Services, Health Units, Department of Indian Affairs, other Provinces and States. Centres of spread of venereal diseases are pointed out to Medical Health Officers or Police, for appropriate action.

Increased interest is being shown in education. However, the resistance of the public to open discussion of venereal diseases means that progress must be slow. Poverty, broken homes, overcrowding, ignorance, alcoholism and lack of social amenities are all related factors to venereal diseases. Professional education is directed to medical and nursing students and to public health nurses, inspectors. Educational material, including films and pamphlets are made available to the public by the department.

Pre-marital and prenatal compulsory blood tests for Syphilis are provided at no cost.

CARE SERVICES

Care Services, a combined project of the Department of Health and the Department of Welfare, became operational on June 1, 1963. This new organization is responsible for the development of services for the aged and infirm in need of care, but not requiring hospital care.

In the Metropolitan area of Winnipeg, Care Services has assumed the responsibility of providing direct services. In rural areas, Care Services provides advisory and consultant services to Health Units and Welfare Regions, to ensure a similar standard of operation and facility throughout the whole province.

Detailed services provided under the Care Services organization include:

Services to Patients

This entails the provision of direct service to the public patient and restricted service involving only consultation, advice and assistance to the private patient.

In providing comprehensive care for an individual, his total needs are assessed and clearly defined. The type of care provided depends on assessment findings regarding the present condition, needs and potential of the patient, his family, his home environment and community resources. Where possible, the patient is sustained in, or projected back into his own home environment. Failing this, a logical sequence of care facilities, such as home of relatives, foster home, residential personal care home, or nursing care institution are considered.

During the first eleven months of 1964 in the Metropolitan area, Care Services office provided services of a diversified nature to 1,184 patients in institutions and 592 patients in Home or Foster Home Care placement.

Services to Hospitals

Care Services assists hospitals in discharging to other facilities, patients no longer requiring acute or extended hospital treatment. These facilities include the patient's own home, home of relatives or foster home, or institution such as residential personal care or nursing type home.

Care Services also provides a medium through which hospital facilities such as Out-Patient Departments, are fully utilized by patients under Care jurisdiction. Furthermore, a consultation service to assist hospitals in the placement of private patients in other facilities is being utilized.

A continuous liaison is maintained with hospitals at the medical, nursing and social welfare levels to ensure a more efficient joint operation.

PLACEMENT AND MOVEMENT OF PATIENTS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Number of Institutional Placements	67	60	45	34	23	46	43	45	25	36	31	33
Number of Community Placements	11	15	15	11	14	24	20	4	19	18	7	14
Number of hospital admissions from Institutions	49	57	35	37	54	66	33	41	39	47	35	34
Number of transfers from one Institution to another	13	14	12	5	33	25	7	4	10	26	11	11
Number of Deaths in Institutions	26	23	15	25	26	28	26	11	10	32	28	23

NUMBER OF PATIENTS ASSESSED FOR CARE
WITH CURRENT AND RECOMMENDED PLACEMENT INDICATED
1964

Current Placement	Recommended Placement	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Hospital	to Community Placement	9	1	6	8	5	8	2	11	10	7	12	9
Hospital	to Light Care - Hostel	1	1	3		1	1	1	4			2	
Hospital	to Nursing Home	30	17	22	18	14	8	28	18	19	17	18	27
Hospital (acute)	to Hospital - (Extended Treatment)	3	3	3		1			1	1	4	2	
Nursing Home	to Continued Nursing Home Placement	3	11	12	6	5	9	7	10	11	7	6	9
Nursing Home	to Community Placement	5	3	2	2	3	1		1	1		3	
Nursing Home	to Hospital	2			2		1	2	2	1	1		
Light Care - Hostel	to Nursing Home Placement			1		1	3	2					
Community	to Continued Community Placement	15	18	19	10	23	22	13	13	24	22	20	18
Community	to Light Care - Hostel		1	2	2	1	1	5	3	1	2		2
Community	to Nursing Home	5	14	8	4	10	14	7	8	5	9	12	5
Community	to Hospital	2	1	2	1	1	1		1	1	1	1	
TOTAL		75	70	80	53	65	69	65	72	74	70	76	70

Service to Facilities and Institutions

Care Services is responsible for setting standards for all elements involved in care in institutions, and ensures adherence to these standards. Responsibilities also include licensing, certification and approval of the various types of care facilities now operating.

Close liaison has been maintained with Elderly Persons' Housing and community agencies such as the Age and Opportunity Bureau and the Canadian Mental Health Association. Joint programs have now been entered into or are under consideration with various agencies to improve the functioning level of existing facilities.

Method of Operation

Applications for assistance are reviewed and referred jointly to a social work staff member and a public health nurse. Pertinent background information is obtained and medical documentation is acquired to ascertain the levels of disability, functional ability, levels of care needs and general requirements.

All medical, nursing and psychosocial information available is presented daily at a Panel Assessment Conference, and a decision made on the care needs for each person. The staff members then carry through the necessary procedures to ensure placement, provision of medical care, nursing care, drugs and equipment.

Patients placed under Home Care are provided with medicare coverage in respect to Medical Services, Dental and other para-medical needs and drugs. Patients placed in light care, hostel, or residential type institutions are similarly provided for. In both instances, the patient chooses his own practising physician, who supervises his care and in conjunction with Care Services ensures continuous provision of services.

Patients placed in Nursing Homes require continuous nursing care and frequent medical supervisory visits. Arrangements are made in all Nursing Homes whereby a physician visits at least weekly to ensure continuous medical supervision.

In all cases, follow-up is provided by the social work staff, and public health nurses. Adequate dietary standards are maintained in all institutions through routine visits by a nutritionist.

Provision of care for public patients is a demanding task involving arrangements for:

- acceptance of new patients
- assessment of these patients
- placement
- admission to hospital if necessary
- holding beds until return from hospital
- patient return to placement facility
- continued medical care
- visits to out-patient departments of hospital
- change of placement
- locating foster homes
- dental services
- optometric services
- provision of equipment such as wheelchairs, walkerettes and crutches
- funerals, burials.

These services are provided on a daily basis for approximately 1,200

patients in institutions, and approximately 600 patients in Home or Foster Home, within the Metropolitan Winnipeg area.

Approximately 50 percent of requests arise from patients already in Hospital and 50 percent from patients being cared for in the community.

Activities in 1964

Home Care

The number of patients on Home Care has increased from approximately 400 in January to approximately 600 in December, 1964.

INTAKE AND CONTINUOUS REGISTER OF PATIENTS

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
New Cases	49	38	60	31	33	52	38	50	31	36	44	54
Cases re-opened	9	15	16	13	4	13	13	13	20	17	18	16
Transferred from Other District Offices	43	2	22	15	41	10	26	25	27	28	25	32
Number of patients in Institutions	1189	1178	1183	1221	1225	1185	1180	1159	1150	1177	1184	1178
Number of patients in Community (Home-Foster Home Care)	404	400	424	441	453	472	488	504	548	563	592	605

Wherever possible, people are provided with care in their own home or in a community placement where they are close to relatives and friends. Care Services is organized, coordinated and supervised to ensure that proper care can be provided in the community. Consequently, breakdown factors can be recognized at an early date, and often prevented. The shortage of care beds in institutions has made it necessary to obtain and sustain Home Care placements.

Institutional Care

Statistics indicate a large grouping of heavy care beds in the Metropolitan area. Many of the rural Homes are light care residential Homes or Hostels.

Rural Non-Proprietary Homes		
28 Homes with a Bed Capacity of	1363	
Rural Proprietary Homes		
16 Homes with a Bed Capacity of	367	
Metropolitan Winnipeg Non-Proprietary Homes		
9 Homes with a Bed Capacity of	1192	
Metropolitan Winnipeg Proprietary Homes		
21 Homes with Bed Capacity of	<u>691</u>	<u>3613</u>
Total Non Proprietary Homes		
37 Homes with a Bed Capacity of	2555	
Total Proprietary Homes		
37 Homes with a Bed Capacity of	<u>1058</u>	<u>3613</u>

Total Rural Bed Capacity in		
44 Homes with Bed Capacity of	1730	
Total Metropolitan Bed Capacity in		
30 Homes with Bed Capacity of	<u>1883</u>	<u>3613</u>

Occupancy Distribution

A survey of Occupancy indicates that of an actual 85,978 days of institutional care, 54,792 days were utilized by Welfare or Public patients. Although the percentage of public patients in institutions varies from a high of 70.9% in the Metropolitan Winnipeg area, to a low of 49.9% in the Brandon area, the average for the whole province is 63.7%.

Since June 1, 1963, there has been an overall shortage of care beds. The need has been greater for skilled nursing and heavy personal care, than for light, residential or domiciliary type care.

Legislation

During 1964, two very important pieces of Legislation were passed.

- (1) The Elderly and Infirm Persons' Act was revised, provided for increased provincial grant support for Elderly Persons Housing. This revision also widened the scope of the Act to allow for development of Personal Care Homes by Non-profit organizations, with government grant support.
- (2) A new section was added to the Care Institution Regulations under the Public Health Act, to raise the standards and control the construction of new Care Institutions. Under this Legislation, the Province can now be assured that all new Care Institutions will be properly planned and constructed to provide the type of care for which they are intended. Also, standards of construction, planning, equipment and fire-safety, will be maintained at a high level.

Home Care

In an effort to expand the present Home Care program, hospital based programs are being developed in the Metropolitan area. These will be coordinated and possibly integrated with the expanding community type home care service now operated by Care Services. An active committee is studying co-ordination and integration and other groups are studying homemaker and meals on wheels services.

Construction of Facilities

Since 1958, the Elderly Persons' Housing Act has been developing excellent housing units and light care hostels for the elderly throughout the province. The tempo of this program has been increased in recent years.

ELDERLY PERSONS' HOUSING CONSTRUCTION PROGRAM

Period	Accommodation in Hostels	Beds in Housing Units	Grants Involved
1958 to mid/1964	904	707	\$1,531,137.70
Under Construction mid/1964	152	283	562,143.26
Projects Approved in Principle	249	396	864,956.44
TOTAL	1,305	1,386	\$2,958,137.40

MONTHLY OCCUPANCY SUMMARY (NOV. 1964)

	Maximum Licensed Beds Utilized	Maximum Days On Licensed Utilized Beds	Actual Days	Percentage of Occupancy	Social Allowance Days	Percentage of Occupancy	Private Days	Percentage of Total Days
Metro Winnipeg	1,649	49,410	48,146	97.4	34,133	70.9	14,013	29.1
Central Interlake	308	9,310	9,067	97.4	4,993	55.1	4,074	44.9
Eastern Region	235	7,050	6,711	95.2	3,906	58.2	2,805	41.8
Brandon Region	518	15,540	14,400	92.7	7,190	49.9	7,210	50.1
Portage Region	150	4,482	4,482	100.0	2,280	50.9	2,202	49.1
Dauphin Region	107	3,210	3,172	98.0	2,290	72.2	882	27.8
Northern Region	No Report	-	-	-	-	-	-	-
TOTAL	2,967	89,002	85,978	96.6	54,792	63.7	31,186	36.3

The discrepancy in total Licensed beds utilized in Table above and Table on page , is due to the fact that some Homes are late in reporting.

The revised Elderly and Infirm Persons Housing Act will allow government to provide grant support to Non-profit organization, such as Municipalities, Religious, Ethnic, and other groupings, for the development of heavier care Homes. It will encourage the development of new, properly planned institutions or facilities across the entire province, create new beds to meet existing needs and allow replacement of many outdated institutions.

In line with the new Government support program for creation of Non-profit Homes, construction of new Proprietary Homes was allowed in 1964. To date, two new Proprietary Personal Care Homes have been constructed, and several more are under consideration and planning.

Coordination of Services

The Manitoba Hospital Commission is currently outlining its program for Extended Treatment and Chronic Care. It is intended that wherever possible, Non-Proprietary construction under the Elderly and Infirm Persons' Housing Act, will be planned on a coordinated basis with the Hospital Commission. This will mean full integration of services and care programs and maximum benefit to the patient.

In the past year, Arts and Crafts, Recreational and Diversional Activity and Occupational and Physiotherapy programs have been introduced into several homes.

Other projects involving psychiatric services, dental services, ophthalmology services, in-service training and educational programs, are underway.

These programs are designed to broaden and improve the scope for care of the elderly and infirm, and ensure full utilization of all hospital services, including resources within the community.

PUBLIC HEALTH NURSING SERVICES

Central office nursing staff is responsible for developing and maintaining a high quality departmental public health nursing service throughout Manitoba.

Function of Public Health Nursing Service:

1. Administration including recruitment, orientation and assignment of staff;
2. Consultation and Supervision to nurses assigned to health units;
3. Provision of direct nursing service in special areas i.e. tuberculosis control, venereal disease control, care services and generalized public health nursing programs in specified geographical areas;
4. Development of educational programs including:
 - (1) orientation of new staff
 - (2) in-service education for all staff
 - (3) affiliation programs for undergraduate student nurses
 - (4) affiliation programs for post-graduate student nurses
 - (5) administration and supervision of the practical nurse program including registration and licensure.

Nursing Personnel

Director	1
Educational Director	1
Nursing Consultants:	
Generalized Public Health Nursing	3
Venereal Disease Control.....	1
Tuberculosis Control.....	1
Care Services	1
Local Health Units	97
Registrar-Consultant for Licensed Practical Nurses..	1
Staff Nurses:	
Generalized Public Health Nurses	3
Instructress - School for Practical Nurses	3
Nutritionist - School for Practical Nurses	1

Educational Preparation of Staff

Number of nurses with degrees	16	-	13.4%
Number of nurses with Diplomas P. H. N. ..	58	-	48.7%
Number of nurses with R. N. 's	45	-	37.9%

The extent to which public health nursing services may be developed is dependent upon the quantity and quality of nursing staff available. Every effort has been made to recruit nurses who are particularly suited to this type of work. Affiliation programs for the undergraduate student nurse have created a greater interest in public health nursing and more young graduates are now seeking this kind of employment. For the greater part of 1964, the department has maintained a full complement of nurses, including the addition of three nursing establishments.

To sustain a high standard of quality of nursing services a well planned orientation experience is provided for each staff nurse, effective in-service educational conferences are held on a regular basis and skillful guidance and direction is given by the nursing consultants through individual and group

conferences. Nursing manpower is conserved by pointing the way to better use of the nurses' knowledge, skills and abilities.

Staff Education

Since its inception in 1916, nursing services in Manitoba has taken a keen interest in various forms of educational programs both in public health nursing conferences and health education.

In-service education for public health nurses has been developed through the years to the point where in 1964 one educational conference was held for senior nurses, two nursing conferences for 37 nurses in rural health units and one conference for 62 nurses in urban centres. Areas of study covered by these sessions included: needs of the adolescent, care and treatment of the mentally retarded child, geriatric care and the role of the public health nurse in follow-up care of patients discharged from psychiatric institutions.

Due to increasing demand for public health nursing services associated with community mental health programs, arrangements were made with Brandon and Selkirk Hospitals for Mental Diseases to provide a two-week affiliation for the nursing consultants and seven senior public health nurses. It is hoped that similar courses can be made available to other staff members involved in this program.

A pre-natal institute for public health nurses from Provincial and City of Winnipeg Health Departments and members of the Victorian Order of Nurses and hospital nurses was held in May, 1964. Planned by Public Health Nursing Services, instruction was provided by the nursing service educational director assisted by nursing consultants. Fifteen nurses attended this ten-day institute.

Since responsibility for prenatal institutes and the organization of pre-natal classes in Manitoba was transferred to Public Health Nursing Services in the Fall of 1963, an attempt has been made to visit nurses who are teaching classes in non-health unit areas with a view to reviewing class registrations, content material and teaching techniques.

	Number Held	Staff Attendance
<u>Institutes held under Federal Grants</u>		
Prenatal	1	15
<u>Staff Educational Conferences</u>		
Urban	1	62
Rural	2	37
Senior Nurses	1	16
<u>Graduate Student Program</u>	<u>Number of Students</u>	
Public Health Nursing Students	7	

Student Affiliation

Traditionally interested in the development of education programs for student nurses, the department arranged for suitable health experience for 298 student nurses from the various Schools of Nursing and the Manitoba University. This experience provided by local health unit personnel not only gives the young nurse a better understanding of the public health program but also contributes to continuity of patient care and recruitment of staff.

Individual staff members interested in education programs have also given much of their personal time to professional organizations responsible for the preparation of professional nursing personnel.

<u>Undergraduate Affiliation Programs</u>		<u>Length of Time</u>
Brandon General Hospital - Junior.....	46	1 day
Brandon General Hospital - Second Year	32	$\frac{1}{2}$ day
Brandon General Hospital - Senior	19	2 weeks
St. Boniface General Hospital.....	47	1 week
Misericordia General Hospital	88	2 weeks
Grace General Hospital.....	55	2 weeks
Victoria General Hospital.....	4	1 week
Total	291	

Tuberculosis Control

The maintenance of a central registry for tuberculosis is the responsibility of a public health nursing consultant, who also assists in planning tuberculosis clinics and acts as liaison between hospital and community. Details of activities in the tuberculosis field are outlined in the Preventive Medical Section.

Venereal Disease Control

In the extremely active area of venereal disease control, a public health nursing consultant and two public health nurses interview patients in clinics, do contact tracing, follow up delinquent patients and carry out an extensive preventive program at the Manitoba Home for Girls, the Provincial Gaol and Home of the Good Shepherd.

A measure of their activities is reflected in statistics related to this work.

In 1964, 1,033 persons were named as Venereal Disease sources, or contacts in the Greater Winnipeg area as compared with 956 in 1963. Of this number 523 were located; 416 required treatment for gonorrhea and 30 required treatment for syphilis.

Efforts concerning delinquent patients and contact tracing required 704 home visits, an increase of 286 over last year.

Institutional work called for 184 visits and 677 examinations. Of these, 30 girls required treatment for gonorrhea and two for syphilis.

Further details concerning Venereal Disease Control are reported in the Venereal Disease Section of Preventive Medicine.

Care Services

The supervision of care being given to 1,834 geriatric patients located in thirty nursing homes and approximately 592 patients in private homes in Metropolitan Winnipeg, in addition to work in assessment and placement, presents a real challenge to the Nursing Consultant and three staff nurses assigned to Care Services. A comprehensive outline of nursing activities in the Care field is reported in the Care Services Section.

Nursing Service to Non-Health Unit Areas

Through a special arrangement with the Village of Brooklands, one public health nurse serves this area three days per week. An attempt is made to carry

out a generalized public health nursing program but demand is such that service is limited in some respects.

The only provincial nursing station in operation in Manitoba is located at Grahamdale in the Inter-Lake area. On call twenty-four hours a day, the public health nurse operating this station provides bedside and clinical nursing in addition to a generalized public health nursing service. Patients are referred to a doctor when conditions indicate this is necessary.

In other areas not served by local health units, public health nursing service is provided on a request basis only. Requests are received from physicians, local school boards, school inspectors, principals, teachers and parents, and referrals from private physicians, hospitals and other health and welfare agencies.

Assistance was also given on several occasions to Care Services in conducting functional assessment surveys of elderly persons in the Home Family Nursing Home, Winnipeg, Notre Dame, Winkler, Altona, Carman and Neepawa areas.

Sabin Campaign

One of the greatest problems to arise in the non-health unit areas during the past year was that of administering Sabin Vaccine to approximately 170,000 persons living in rural Manitoba without organized public health nursing service. Where it could be arranged, health unit personnel and nurses from Indian and Northern Health Services assumed responsibility for those municipalities surrounding their districts. Four nursing teams, consisting of a nursing consultant as leader and public health nurses from suburban health units with the assistance of four health inspectors, were organized to carry out the program in southern Manitoba. Co-operation and assistance received by nursing staff from community groups contributed to the success of the Sabin Vaccine program.

Practical Nursing Program

Two courses of education are open to young people in Manitoba wishing to become licensed practical nurses.

The Central School for Practical Nurses at the Manitoba Institute of Technology and the St. Boniface School for Practical Nurses offer a one-year course of four months in the classroom and eight months of clinical hospital experience.

An alternative program is provided through a three-year combined psychiatric and practical nursing course offered at Brandon and Selkirk Hospitals for Mental Diseases and the Manitoba School for Mentally Defective Persons in Portage la Prairie.

Responsible for the development and administration of the practical nursing educational program, the Registrar-Consultant reports that 154 were licensed from the one-year course and 29 from the three-year course during 1964. There are at present 1,395 active licensed practical nurses in Manitoba.

There seems to be an increasing interest in practical nursing as a career, with 55 students enrolled for the January 1965 class at the Manitoba Institute of Technology. Eighty students have been accepted for the August 1965 class and 21 students accepted for the January, 1966 class. Thirty-eight other applications are being processed at the present time.

PRACTICAL NURSING

One Year Course	Central School	St. Boniface School	Total	Increase or Decrease
Students enrolled in 1964	100	88	188	+ 6
Students who withdrew in 1964	7	5	12	-
Students who completed the course in 1964	101	73	174	+15
Students who became L. P. N. 's in 1964	90	64	154	+ 1

Three Year Combined - Psychiatric and Practical Nurse Course

	Brandon Mental	Portage Mental	Selkirk Mental	Total	Increase or Decrease
Students enrolled in 1964	23	12	20	55	-
Students who withdrew in 1964	16	5	9	30	+ 6
Students who completed the course in 1964	16	7	6	29	- 8
Students who became L. P. N. 's in 1964	15	7	7	29	+ 2

Results of State Board Test Pool - P. N. Licensing Examination - 1964

Candidates - 209 Students of Manitoba Practical Nurse Courses	18 failures
14 Students trained as P. N. 's outside Manitoba	5 failures
20 Students with partial R. N. training	- failures
Total 243	Total 23 failures
PASSED - 90.1%	FAILED - 9.90%

Number of new practical nurse licences issued	208
Number of practical nurse licences renewed	1,349

* Provisional Practical Nurse permits issued	255
Exchanged for Practical Nurse licence	207

Total number holding a Provisional Practical Nurse Permit	53
Total number holding Practical Nurse Licences and Permits	1,610

* Provisional Practical Nurse permits are exchanged for licence when the applicant has completed requirements for the same.

LICENCED PRACTICAL NURSES ACTIVE IN MANITOBA	1,395
LICENCED PRACTICAL NURSES ACTIVE OUTSIDE MANITOBA ..	162
TOTAL ...	1,557

On December 11, 1964 a one-day conference was held for Registered Nurses who assist in the clinical area of the practical nurse training program. Centering around the clinical aspects of practical nursing, the conference was attended by 64 nurses from the 22 hospitals in Manitoba offering clinical experience.

Complying with a request from Licenced Practical Nurses, the Education Committee and Advisory Council for Licenced Practical Nurses have sanctioned an in-service educational conference in the Spring of 1965. Questionnaires concerning program content are being mailed with notices of licence fees for 1965.

The closing of the Doctors' and Nurses' Registry on December 31, 1963 has meant that a great many phone calls come to the office of the Registrar-Consultant. An attempt has been made to find practical nurses for all patients requiring help in homes. One hundred and forty-three placements have been made and arrangements completed for another forty-five where placement did not occur for one reason or another. Approximately fifty nurses are available for home nursing and are kept busy.

DENTAL SERVICES

Dental Services are directed toward the improvement of the level of dental health for all Manitobans. This objective is approached on four fundamental principles; Dental Health Education, studies of dental health problems, utilization of effective dental public health measures, and dental treatment under certain circumstances.

Dental programs for the Province are co-ordinated from a central office in Winnipeg. Activities are channelled through four regional offices - one at Dauphin, one at Brandon and two in the Norquay Building in Winnipeg. The two regions covered from Winnipeg include the area from Lake Manitoba to the Eastern and Southern borders of the Province; and the three local health units in the suburbs of Greater Winnipeg.

Established Positions

8 Dentists	-	1 Director
	-	4 Regional Directors, Dental Public Health
	-	4 Clinical Dentists
2 Dental Hygienists		
8 Dental Assistants		
1 Secretary		

PROGRAM PLAN

A province-wide Dental Health Education program is underway, including studies of dental needs of municipalities upon request of the local government, health unit, or school agency. This program is aimed at motivating parents and children to improve oral dental health. Activities involve:

- (a) Rural School Projects - special efforts are made by dental staff to visit small schools throughout the province. Approximately 80 schools are visited each month during the school year. Visual aids, classroom demonstrations, and distribution of pamphlets, and personal contact with teachers are utilized to promote dental health education.
- (b) Classroom Dental Inspections - This project generally results in an application for treatment service through one of the two schemes available to Rural Manitobans not having a resident dentist. Subsequent reports are used in assaying a community's needs.
- (c) Annual Dental Health Week Program - in co-operation with the Manitoba Dental Association.
- (d) Professional Education - seminars and conferences held with school teachers, nurses, and groups of rural dentists. Also, contributions were made to public health lecture series of the Dental and Medical Colleges of the University of Manitoba, Teachers' College in Brandon and three of the nurse training hospitals in Winnipeg.

Dental Education Program

The following Municipalities had visits from Dental Health Education Teams.

REGION I

Minitonas	Mountain	Shell River	Boulton	Hillsburg
Ethelbert	Grandview	Alonsa	Lawrence	Dauphin
Mossey River	Snow Lake	Ochre River	St. Rose	Russell
McCreary	Clanwilliam	Rosedale	Minto	Glenella
Lansdowne	The Pas	Cranberry Portage		

REGION II

Woodworth	Blanshard	Daly	Whitehead
Elton	Cornwallis	Oakwood	North Cypress
Victoria	MacGregor	Rivers	North Norfolk

REGION III

Eriksdale	Coldwell	Rockwood	Lac du Bonnet
Hanover	Morris	DeSalaberry	Rhineland
Montcalm	Franklin	Emerson	

	Children's Dental Inspections	Number Schools Visited	Number Children Attending Education Program
<u>Region I</u>	550	88	8, 205
<u>Region II</u>	5, 172	152	7, 035
<u>Region III</u>	2, 719	27	2, 719
TOTALS	8, 441	267	17, 959

Studies on Dental Health

- (a) A classroom dental survey and educational project covering Grade I to Grade IV in fourteen municipalities was brought to a conclusion this year, as its major aim had been achieved. These aims were to gather data required for future planning and to secure financial support from all fourteen communities for an interceptive treatment, educational and preventive program.
- (b) A pilot project utilizing staff dentists, assistants and student dental hygienists in a combined treatment, educational and preventive program, was successfully operated in four of the municipalities during

the summer period. This program demonstrated the feasibility of operating clinics in the suburban areas during the summer holiday period, and of utilizing student hygienists at the end of their first year of training.

- (c) A project to gather base-line data of an epidemiological nature on all Grade II children in one municipality, utilizing dental students in their first year has been completed. The data will be used to test the long range effect of the program carried out at Grade I level.
- (d) A pilot project utilizing student dental hygienists in the final term of their two-year course to provide prophylactic, preventive and educational programs for brain-damaged children in the St. Amant Ward.
- (e) Five towns received pre-fluoridation surveys in preparation for installation of treatment systems.
- (f) Classroom dental inspections provide information of local interest, in addition to comparative data on the evaluation of dental health education programs.
- (g) Dental information was collected for Care Services regarding oral health of a select group of institutionalized aged and infirm citizens.
- (h) A consultant service has been provided regarding construction, equipment and staffing of the psychiatric hospitals in the Province. Also, a study was completed and recommendations were given to a charitable organization regarding the purchase of equipment, and establishment of a dental clinic for indigent adults and teenagers in Winnipeg.

DENTAL TREATMENT

Child Dental Treatment Program - designed to support dental health education programs, especially in areas where no dentist is established. Prevention and interception are the objectives in the program.

Dental Care is available "free" to all children in a community utilizing the Province's dental clinical services, (Indian and Welfare included). Financial and accommodation arrangements are made by a local sponsoring agency - Municipality, Voluntary Organization, School District or Welfare Agency. An incremental program commencing with preschoolers, Grade I, II, III is organized to provide comprehensive dental treatment to the extent of facilities available through mobile clinics for those communities interested in accepting the dental health improvement treatment program. Continuity is maintained by routine and regular clinics held on a six to eight month basis.

Clinical services are not primarily a welfare or indigent service, but a means to accomplish the desired end of assisting rural citizens to help themselves attain better oral health.

A special clinic for Mentally Retarded and Handicapped Children is also provided for children confined to St. Amant Ward. This is a team effort requiring dental and medical considerations including general anaesthesia.

Mobile Dental Clinics

The following is a record of the activities of mobile clinics during 1964:

Number of Clinic Days	414
Number of Schools	78
Number of Children Treated	3,829
Number of Children Completed	1,614
Number of Children Not Requiring Treatment	603
Exodontia - Deciduous Teeth	2,254
Exodontia - Permanent Teeth	467
Restorations - Amalgam Surfaces	6,979
Restorations - Silicate Surfaces	316
Prophylaxis	781
Other Treatments	4,664
Children Absent During Time of Clinic Visit	117
Children Whose Parents Declined Service	838

Clinics were held at the following locations during the year:

R. M. DeSalaberry	St. Boniface Health Unit
R. M. Grahamdale	St. James-St. Vital H. U.
R. M. Miniota	Kildonan-St. Paul H. U.
The Pas	Binscarth
Brookdale	Oak Bluff Colony
Springfield Colony	Clearwater Colony
Milltown Colony	Huron Colony
Swan River	La Fontaine
Moose Lake	Berens River
Gypsumville	Churchill
Duck Bay	Dog Creek
Cranberry Portage	Fisher Branch
Camperville	Thicket Portage
Ashern	Cormorant
Manigotogan	Wabowden
Wanipigow	Clear Creek
Fairford	

Dental Care Plan

A scheme is available whereby a community can obtain a dentist on a part-time private practice basis where there is no dentist available. This is a joint effort between Dental Services and the Manitoba Dental Association. The Health Department provides and transports mobile dental equipment to a location when an agreement has been reached between a dentist and the community. Clinics are generally of a week's duration.

PUBLIC HEALTH LABORATORY SERVICES

A comprehensive versatile laboratory service is provided to the medical profession, public health workers and the general public by the Fred T. Cadham Public Health Laboratory.

This laboratory services, centred in the Medical College Building in Winnipeg, is staffed by two medically qualified laboratory specialists, a bacteriologist, biochemist and a complement of technicians, laboratory assistants and clerical staff. The chemist, one laboratory technician and one clerk-typist are located in the laboratory of the Brandon Hospital for Mental Diseases. This branch laboratory deals with laboratory services both at the Brandon Mental Hospital and the Laboratory and X-ray Units in the western part of the province. Branch laboratories at Dauphin and the Norquay Building in Winnipeg, where sanitary bacteriology is done, also come under the administrative control of the Cadham Laboratory.

Work Load

Dominion Bureau of Statistics Units from Provincial Laboratory	389,481
Dominion Bureau of Statistics Units from Dauphin and Brandon	<u>44,989</u>
	434,470
Dominion Bureau of Statistics Units for the Year 1963 was	421,283
This shows an increase of 3% in 1964.	

Detailed services include: diagnostic bacteriology; milk and water examinations; syphilis serology tests, food examinations, clinical pathology's consultative service; control program and training; applied research; and emergency services.

Long Established Programs

Diagnostic Bacteriology

All physicians in the province who do not have local facilities to examine specimens for possible pathogenic micro-organisms, are provided a diagnostic service whereby identification of these organisms and antibiotic sensitivity tests may be done. Thousands of specimens annually in the form of nose and throat swabs, sputa, urine, feces and wound swabs are received from various parts of the province. Multiple laboratory procedures, sometimes necessitating animal inoculations are often necessary in the examination of a single specimen. This service is of benefit to the practitioner who is treating an infection in hospital or in a home and also to the epidemiologist who is tracking down a suspect case or carrier who might spread disease organisms throughout a community. During the past year the Cadham Laboratory was able to assist the Provincial Epidemiologist in detecting and isolating cases and carriers of diphtheria and in the detection of multiple cases of typhoid and the investigation of contacts of these cases. The typhoid cases resulted in the examination of hundreds of blood and stool specimens for detection of the carrier state.

a. Bacteriology of wounds, exudates, etc.

Specimens for:

1. General examination	7,553
2. Examinations for staphylococcal infections	322
3. Antibiotic sensitivity of bacteria	4,569
4. Bacteriophage typing of staphylococci	738

b. Specific Bacteriology

Specimens for:

1. Tubercle bacilli(1.4% of which were positive)	2,794
2. Gonococci(9% of which were positive)	3,721
3. Salmonellae and enteropathogenic E. coli, etc.(3.6% of which were positive)	2,024
4. Diphtheriae(.3% of which were positive)	3,245
5. Hemolytic Streptococci	2,873

Sanitary Bacteriology

Sanitary bacteriology involves testing which is designed to establish the potability of milk products and drinking water. These tests are performed at the laboratory on the tenth floor of the Norquay Building and also in the small branch laboratories at Dauphin and Brandon.

Milk and water examinations are done on a routine scheduled basis in co-operation with health officers and sanitary inspectors. Water examinations include specimens from municipal supplies, wells, rivers, lakes and even sewage when requested. Milk examinations are done not only on pasteurized milk and milk products but also on raw milk taken from the dairy.

During the year the Cadham Laboratory took on all the sanitary bacteriology that was formerly carried out by the City of Winnipeg. The Department of Health, through the Laboratory Services, now exclusively examines raw and pasteurized milk products for bacterial content.

Seasonal demand for the examination of waters from modified and other outdoor swimming pools was also met by the Sanitary Bacteriology Department. Restaurant eating utensils such as cutlery and pottery are examined for adequate cleansing by the swab rinse technique in the milk and water section upon request.

Milk samples, including branch laboratories at Brandon and Dauphin ...	11,484
Water samples, including branch laboratories at Brandon and Dauphin..	18,688
Restaurant survey swabs, including branch laboratory at Dauphin	1,323
Raw milk examinations	5,746

Syphilis Serology

Examination of blood samples for the detection of syphilis is another important and long established function of the laboratory. During the year over ninety thousand separate specimens were received for testing. Specimens are received from physicians all over the province and may be requested on the basis of routine procedure, diagnostic procedure, as a guide to therapy and as part of a pre-employment, pre-natal or pre-marital examination.

Work is still underway in the use of a fluorescent microscope technique to confirm specimens found reactive by other less specific tests. The laboratory staff are also working in co-operation with the Director of Venereal Disease

Control in tabulating medical findings recorded from patients attending the Provincial Venereal Disease Clinic and in correlating these findings with the serological results as obtained in the laboratory.

Blood Specimens.....	81,981
Cerebro-spinal Fluid Specimens..	1,913

Non-Syphilis Serology

Serological investigations are also performed to aid the physician in the investigation of patients with rheumatic diseases, enteric fevers, brucellosis and infectious mononucleosis.

a. Rheumatic Diseases

1. Antistreptolysin titre	2,587
2. C. Reactive Protein	1,500
3. Latex Fixation	1,927

b. Infectious Diseases

1. Typhoid, Paratyphoid	696
2. Undulant Fever(42% of which were positive)	931
3. Infectious mononucleosis(10% of which were positive)	1,557

EXPANDING PROGRAMS

Food Examinations

This work is done in close co-operation with the section of Food Control. No investigation is proceeded with until the nature of request and preliminary investigation has been undertaken by Food Control.

Examinations may be done on newly processed and packaged foods when introduced on the market. This is done not only where there has been some indication of unwholesomeness but also where, by nature of the product, it is anticipated that some difficulty may arise as to its quality.

Similarly, after consultation with Food Control and/or the Director of a local health unit, any foodstuffs which are suspected of being responsible for cases of food poisoning, are examined.

New techniques in the field of food bacteriology are constantly being developed and it is envisaged that the examination of food products may shortly become a major function of the laboratory.

Clinical Laboratory Service

This service is provided by the Cadham Laboratory and the Brandon Mental Hospital Laboratory to supplement services at the local level in Laboratory and X-ray Units. The Cadham Laboratory has been of great assistance to the Manitoba Rehabilitation Hospital in performing clinical chemical estimations and the examination of blood films which the institution has not been able to cope with in its own laboratory.

Hematology	360
Phenylalanine Examinations ...	1,246
Biochemistry	3,166

W PROGRAMS

During the year the Cadham Laboratory commenced a pilot project on newborns at the Winnipeg General Maternity Pavilion for the detection of elevated blood phenylalanine levels. This involves a simple test procedure whereby a drop of blood obtained from a newborn's heel puncture is put on a piece of suitable blotting paper. A disc is punched out of the blotting paper and the presence of a zone of growth about the disc on a spore plate is noted. By this technique we can rapidly screen newborns as to the presence or absence of an inborn error of metabolism known as phenylketonuria. If this is not detected within the first few weeks of life, progressive brain damage and eventual idiocy will result. This program will be extended to eventually encompass all the newborns in the province.

CONSULTATIVE SERVICES

Reference Bacteriology

This service is provided to physicians and hospitals throughout Manitoba. An example would be the phage typing of coagulase positive staphylococci for epidemiological purposes and the complete identification of organisms difficult to identify. The bacteriological department cooperates with the provincial veterinary department when requested to aid in the investigation of epizootics and possible contamination of animal foods.

Laboratory Supervision and Training

The Cadham Laboratory, with assistance from the Brandon Mental Hospital Laboratory, provides technical assistance and supervision to all laboratories coming under Laboratory and X-ray Unit coverage. Technical advice is provided to other laboratories on request. The Cadham Laboratory has also provided working space and office space for a fulltime senior technician who is engaged in the laboratory supervision of Laboratory and X-ray Units. This travelling technician works under the immediate technical supervision of the senior members of the Cadham Laboratory staff. A permanent committee consisting of the Director of Health Services and personnel from the Cadham Laboratory meets regularly to consider technical and administrative problems arising in Laboratory and X-ray Units.

Technician Training

Although student technician training is now concentrated in the Manitoba Institute of Technology and the laboratories of affiliating hospitals, the Cadham Laboratory still offers in-service training to technicians both in Laboratory and X-ray Units and from outside the service. During 1965, there were 65 technology students in training under bursary in the Province.

The central laboratory also participates in an educational program for medical students and physicians preparing for specialities. The Director and Assistant Director are members of the Medical College Faculty and participate in instruction to medical students in bacteriology and public health. The laboratory arranges promotional examinations for technicians on establishment and for those working with Extension Health Services.

The Director of the Cadham Laboratory is a member of the Advisory Committee to the Department of Education on laboratory training.

Applied Research

Studies have been carried out over the past year on fluorescent antibody techniques in the detection of pathogenic E. coli from stools. Some fluorescent antibody technique studies were also done on the identification of group A haemolytic streptococci. Although both these studies are far from complete, at least they have laid the groundwork for future investigation. It is also hoped that the fluorescent antibody technique for the detection of syphilis may be incorporated into the routine serological investigation for syphilis.

Virus Laboratory

The Cadham Laboratory co-operates with the Virus Laboratory of the University of Manitoba in providing diagnostic virus services. The Director of the Cadham Laboratory is also a co-director of the Virus Laboratory and a proportion of the Central Laboratory appropriation is given over to the maintenance of virus diagnostic service.

Emergency Services

In the event of a national emergency, the Central Laboratory has plans to transfer activities to its western division at the Brandon Mental Hospital Laboratory, where fundamentally important laboratory tests aimed at maintaining safe water, milk and food supplies would be performed.

NORTHERN HEALTH SERVICES

This organization is now in its fifth year of operation. The original five-year plan, as set out in 1959, has by and large been completed. The plan of 1959 was broadly as follows:

- (a) To establish clinical treatment centres in all areas where there was no available medical practitioner. This has been done in the form of Nursing Stations or clinical facilities in areas up the Hudson Bay Line and in areas like Moose Lake, Grand Rapids and Easterville.
- (b) To provide trained personnel to work from these clinic stations and in some cases, for a resident Nurse's Aid, Licensed Practical Nurse or Lay Dispenser with drug cache, to be on hand to treat where possible, the patients attending the clinics requesting medical assistance.
- (c) In the field of Environmental Sanitation, to provide methods of human waste disposal, garbage disposal, and also to insure that each community had safe drinking water.
- (d) To establish the best possible communications between all outlying areas with the base at The Pas. This has been done by means of telephone or M. T. S. radio telephone.
- (e) Regular monthly staff visits by the Medical Director from The Pas to each area when possible, or to substitute with a trained Public Health Nurse.
- (f) To bring about a program of Preventive Medicine and to follow-up with the clinical treatment aspect of the scheme.
- (g) To endeavour to educate the population, especially Indian and Metis in each area, as to: the need for good hygiene in their homes, proper prenatal supervision for expectant mothers, the importance of preventative vaccine inoculations and regular chest x-rays as part of the Sanatorium Board's program of Tuberculosis control.
- (h) Close scrutiny and follow-up on all cases of Venereal Disease.
- (i) Extension of existing Public Health Inspector's scrutiny of restaurants, all food and milk processing establishments and supervision of fish handling throughout the numerous small fish stations as part of a program of quality control for Manitoba's northern fishing areas.

The foregoing program has been consolidated and indeed expanded this year but has brought with it the problem of maintenance of the services that have been instituted. Communications and transportation still remain difficult from isolated areas where there is no rail or road facility, but despite this there have been few instances where patients have not been tended to and brought to the nearest hospital if severely ill, even from some of the most remote areas. The Manitoba Government Air Service and Lamb's Airways have been at all times co-operative and have done their best to facilitate the movement of patients. Many patients are moved by rail on the CNR route (Bay Line).

This year the Grand Rapids Manitoba Hydro scheme has brought about two essential geographical changes - one has been the raising of the lake water level at Moose Lake, necessitating the movement of some thirty odd houses by the Forebay Committee. These houses were destroyed and new houses built, by, and at the expense of, the Forebay Committee.

Secondly, the community formerly known as Cedar Lake has now been

moved entirely to a new location at Easterville as this area will eventually be entirely under water. All the housing at Easterville - either new, or moved from Cedar Lake, has been provided by the Forebay Committee.

Sanitary Services

Plumbing Inspections	44
Sewage Disposal Systems - Private	105
Municipal Disposal Systems or Water Supply	134
Public Premises and Public Accommodation	35
Industrial Premises and Offices	1
Private Premises.....	1, 243
Camps.....	55
Bathing Premises.....	12
Schools	7
Vermin and Rodent Control	4
Waste Disposal Grounds	32
Nuisances.....	163
Institutions and Boarding Homes	5
Barbershops	17
Raw Milk Producers	61
Milk Processing Plants.....	100
Food Retail Outlets	71
Restaurants and Beverage Rooms	100
Food Processors	147
Food Complaints	1
Bacteriological Analyses - Water	423
Milk Raw (Resazurin and Loop Plate Count)	311
Milk - Pasteurized	188
Field Tests (O. T., C. O., Etc.)	40
Butter Fats	309
Meetings.....	45

Nursing Services

Child Health Clinic Attendance	2, 475
D. P. T. and P. Innoculations	825
Smallpox Vaccinations.....	171
School Visits	300
Home Visits	915
Typhoid Innoculations	16
X-ray Surveys:	
Thicket Portage	758
Pikwitonei	195
Moose Lake	568
Cedar Lake	350
Grand Rapids	202
The Pas	2, 360
Wanless	51
Polio Vaccines	13, 835
Cytology Examinations (Pap Smears).....	30

Activities and Problems in Specific Regions

The Pas

School immunization coverage in The Pas (population 6,000; school population 1,900), has been extremely thorough. Special efforts have been directed towards certain public health problems that have arisen with the integration of children from a local reserve settlement to town schools.

General services provided by the public health nurse at The Pas include: Child Health Conferences, Well Baby Clinics, Prenatal Classes, School Immunization Programs, Home Health Visits, Contact Tracing for Venereal Disease Cases, Tuberculosis follow-ups and mental health problems.

Sanitation and food quality control checks, including milk sampling, have not shown any deterioration in The Pas during 1964. Extra stress has been placed on milk quality sampling and control and inspection of all eating establishments. The Pas water supply is tested twice daily.

The Bay Line Communities

The Public Health Nursing and treatment clinic program has been maintained for these communities on a monthly basis and drug caches operated by Lay-Dispensers.

Clinical buildings up the Bay Line which were part of the "Kelsey Project" are almost completed and each one is in a habitable and workable condition. There are still problems of water supply and electricity at Wabowden Nursing Station which is the base from which the Bay Line Nurse works her area.

A larger percentage of time occupied by the nurse on the Bay Line concerns treatment clinics which are extremely well attended and immunization programs for children.

A pilot program of home treatment for T. B. patients from Thicket Portage has been underway during 1964. These patients have been discharged to their homes from Clearwater Sanatorium and Ninette. They are kept under close surveillance by the Lay-Dispenser and Public Health Nurse in that area. No difficulties have arisen in continuing the medicinal treatment of these T. B. patients and it is hoped that this scheme may be a good example for home treatment despite what seem to be adverse home conditions for treating such cases.

Maternity cases on the Bay Line, for the most part, come to St. Anthony's Hospital at The Pas for their confinement but many babies are delivered at home, often under the care of a local midwife, with advice, when requested, from the Public Health Nurse and sometimes from the Lay-Dispenser in each area. Most complicated maternity cases are advised to come to The Pas for delivery. In northern and more adjacent sections of The Bay Line, it has been the policy to use Thompson Hospital as a point of entry for acutely ill cases.

The Bay Line is most certainly the most arduous Public Health Nursing task in Northern Health Services as the nurse has to rely on train schedules at all hours - sometimes using way-freights to fulfill her commitment each month. The Medical Director's clinical trips on the Bay Line are done by aircraft to facilitate coverage of a clinical schedule within five to six days. By train, this schedule would take 14 days. Clinical trips are made each month.

Churchill

One public health nurse and one Cree Indian Nurse's Aid hold Well Baby and Immunization Clinic Programs at Churchill and sickness clinics, mostly for inhabitants of the Chipewyan Camp 10 and Churchill flats.

With regard to Environmental Sanitation, in the townsite of Churchill, most houses do not have running water but rely on a town delivery service for water supplies. There is no main sewage disposal system and households rely on chemical and pail type closets which are emptied into large communal pits which are periodically pumped out. Garbage collection is still rather spasmodic but the town Administrator is aware of the inadequacies of the service and is attempting to improve conditions.

Moose Lake

This community of some 400 persons has been served through periodic visits by a public health nurse and the Medical Director. Continuous, limited service is provided by a permanent resident Indian Nurse's Aid. Clinics are held in a building owned by the Anglican Parish. Immunization programs are well advanced but this community has problems of pediculosis, impetigo, scabies and venereal disease similar to other areas throughout the north.

Moose Lake's population was effected to a small extent by the Grand Rapids Hydro scheme as the lake water level was raised sufficiently to flood out some 30 houses. Forebay Committee of Hydro provided new houses to replace those that were at the flooding level. When new houses were provided, a sanitary pick-up scheme for human night soil and garbage was put into operation. As Moose Lake's drinking water supply is from wells which could become contaminated from human feces, a system of concrete slabs with privy pails for night soil was established by Northern Health Services. A tractor, a tank-type wagon and garbage pick-up trailer were purchased by Northern Health Services on behalf of the Forebay Committee who provided the timber and materials to make garbage stands and also paid for garbage cans for each household. The sanitary pick-up scheme was set in motion in September with Northern Health Services employing two local men to operate the scheme, at a cost of \$435.00 per month. This sanitary pick-up system has been operating fairly smoothly.

Easterville

This is a new community with almost entirely new houses. The inhabitants are of the Cedar Lake Band who reluctantly moved from their former location at Cedar Lake as part of the Hydro Grand Rapids relocation scheme. Cedar Lake will eventually be completely flooded out once the waters rise in the Hydro Forebay.

Easterville now has a new Nursing Station built by the Forebay Hydro system and this is staffed by a resident Licensed Practical Nurse. The Nursing Station is to contain the usual drug cache and treatment facilities with the usual M.T.S. radio telephone contact with The Pas. Easterville's terrain is similar to Moose Lake, being on a limestone ridge, and sanitary necessities for this area are exactly similar to Moose Lake. Therefore similar night soil and garbage pick-up has become the responsibility of Northern Health Services and will require similar arrangement as at Moose Lake. In Easterville, equipment necessary to conduct such a scheme has been left by the Hydro authorities for the use of that community.

Transportation of acutely ill patients out of Easterville to The Pas is a problem in that landing conditions for pontoon aircraft in the bay at Easterville are often unsuitable due to high winds and waves. Many patients have been driven to Grand Rapids and treated by the Hydro doctor at the Hydro Hospital in Grand Rapids. This service however, will soon cease as the Hydro Hospital at Grand Rapids will be closed on completion of the construction project.

Grand Rapids

Population of this township, will be depleted to approximately 1,100 persons by the year end on completion of the hydro project. The Hydro Hospital will be closing at that time.

Northern Health Services has, to date, had a Nursing Station with public health nursing services directed towards school health and immunization programs. There will now have to be an extension of services, which will provide treatment as well as preventative health services.

The Nursing Station has been purchased by the Public Works Department, renovated, and the proper plumbing and septic tank sewage is now being installed at that station, which should be in operation early in 1965. A resident Licensed Practical Nurse will be stationed at Grand Rapids Nursing Station. It is expected that there will be a considerable increase in demand for air transportation of patients from Grand Rapids in the future. It is hoped that maternity cases occurring in Grand Rapids can be handled by Ashern or Winnipeg.

Grand Rapids' commitments can now be regarded as an extension of responsibilities for Northern Health Services at The Pas.

Lynn Lake

This year, in July, a Public Health Nurse was stationed at Lynn Lake Nursing Station which is the property of Indian and Northern Health Services. The nurse at Lynn Lake is co-operating with Indian and Northern Health Services in their commitment in that area plus instituting a Public Health program for that community. Child Health and prenatal clinics have been started. Immunization schemes and venereal disease control including follow-up has constituted the bulk of the work for the nurse to date. Lynn Lake is a mining town with its own company medical doctor.

This doctor is also a Deputy Medical Officer of Health and responsible to the Director of Northern Health Services for sanitation problems arising in this area. Sanitary inspection work at Lynn Lake is carried out by inspectors stationed at The Pas.

Thompson

Thompson is a well-organized mining town with company doctors acting as Deputy Medical Officers of Health. Inspection of eating establishments and other sanitary problems are handled by staff at The Pas.

Other Activities

A Sabin Polio campaign was carried out this spring and a cervical cancer ("Pap" smear) survey was done in Bay Line and Moose Lake areas.

Travel by Northern Health Services Personnel

1964

	Train	Air	Road	Total	Monthly Average of Miles
Medical Directors	1879.4	19188	4977	26044.4	2,170
Public Health					
Inspectors	7742.3	17647	11291	36690.3	3,057.5
Public Health					
Nurses	16666.6	17180	19513	53359.6	4,446.6

