HEALTH REFERENCE BOOK

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Vital Statistics Division

HEALTH REFERENCE BOOK
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FOREWORD

This volume is a revision of the Health Reference Book published at the time of the Dominion-Provincial Conference of 1945, and assembled under the direction of the Interdepartmental Committee on Health Insurance, composed of Dr. G. B. Chisholm (Chairman), Dr. G. D. W. Cameron, the late Dr. J. J. Heagerty, Dr. K. G. Gray, Messrs. Alex. Skelton, J. E. Howes, R. B. Bryce, J. E. Coyne, R. E. Curran and J. T. Marshall (Secretary). This revision incorporates additional reference material compiled since that time on the instructions of the Committee.

The report contains the revised Dominion proposals for the establishment of a national health insurance system, and for the allocation of the projected Dominion health grants.

The original reference book and the present revision were prepared by Miss Frances Weekes, Dr. Mary Ross, Miss E. Clarke, Miss I. Moffatt, and Mr. H. L. Robinson of the staff of the Dominion Bureau of Statistics, and Mr. J. S. Cudmore of the Department of National Health and Welfare, under the supervision of Mr. J. T. Marshall, Chief of the Vital Statistics Branch of the Bureau, and Mr. J. E. Howes, of the Bank of Canada.

The production of this volume was greatly facilitated by the willing cooperation of the following provincial Deputy Ministers of Health: Dr. B. C. Keeping, Prince Edward Island; Dr. P. S. Campbell, Nova Scotia; Dr. J. A. Melanson, New Brunswick; Dr. J. Gregoire, Quebec; Dr. J. T. Phair, Ontario; Dr. F. W. Jackson, Manitoba; Dr. C. F. W. Hames, Saskatchewan; Dr. M. R. Bow, Alberta; and Dr. G. F. Amyot, British Columbia.

This revision is published by the Dominion Bureau of Statistics in collaboration with the Department of National Health and Welfare and the Cabinet Committee on Dominion-Provincial Relations.

H. MARSHALL,
Dominion Statistician.

OTTAWA,
November 15, 1946.

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1. INTRODUCTION

Health services carried out by public authorities are part of the range of government activities directed toward improving personal welfare and raising community standards of living. They have a far-reaching impact on the social and economic life of the country through their direct bearing on the lives of individuals and through indirect effects such as increasing national productivity, and modifying the composition of the population. All these changes, in turn, alter the character of health problems, so that new services are required and the whole health programme is constantly being modified as part of a changing economic and social situation.

At any particular time, the character and extent of services carried out by health authorities are determined in large degree by public demand, which depends on tradition and background in the area served, the level of public education, and a wide variety of related social and economic factors.

An illustration of the relationship between health and social change is found in the impact of health services on population composition. This is reflected in an increased expectation of life and in the altered age distribution of the population.

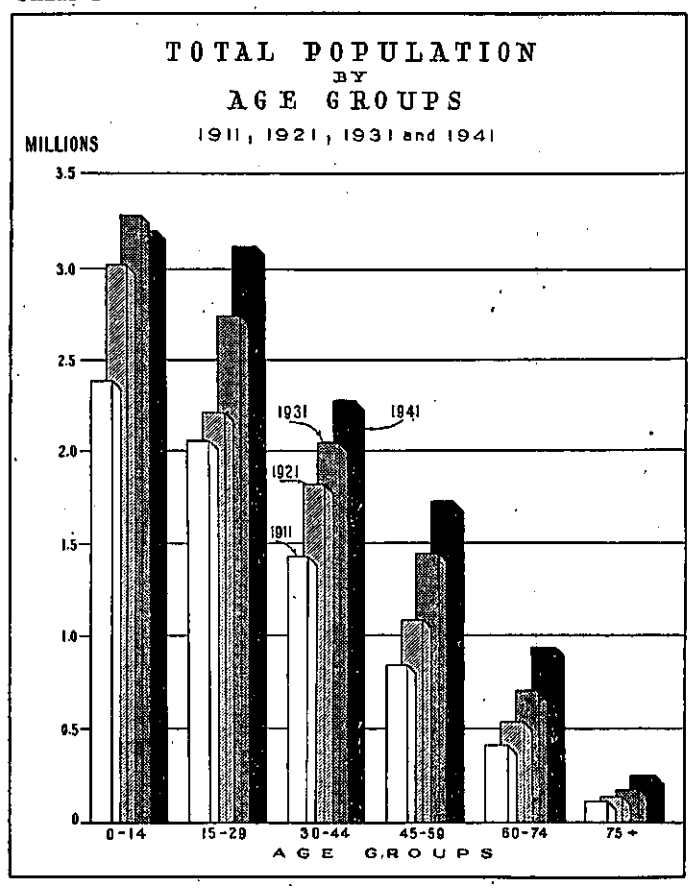
While life tables calculated about the census year 1931 showed an expectation of life at birth of less than 60 years for males and less than 62 for females, recently calculated tables for 1940-42 showed that expectation of life at birth had increased to slightly less than 63 years for males and over 66 years for females.

The Canadian rate of increase during the thirties is generally in line with that shown for the United States and the United Kingdom during the longer period for which life tables have been constructed in those countries. In all three countries, the increased length of life has been due largely to the decline in deaths of persons during their infancy, youth and early middle years. Later age groups have not fared so well. It is a striking fact that the expectation of life of persons 60 years of age and over has not measurably increased during the period for which figures are available in any of the three mentioned countries.

Reduction of mortality among the young has been brought about by the application of knowledge, gained by research, through improved hospital facilities, the extension of medical care provisions, the improvement of community health services, education and nutrition, and the general raising of living standards. These and other factors lie behind the increased expectation of life, and are reflected in an age distribution shifting upward as the population matures. In Canada, there have been special modifications in age distribution because of heavy immigration in the early years of the twentieth century. This was offset in some degree by heavy emigration.

Chart 1 illustrates the growth of the Canadian population by principal age groups from 1911 to 1941. It illustrates the extent of population growth and the increase in the relative importance of those in the older age groups.

CHART 1



While there are clear indications that the Canadian population is beginning to mature, the ageing of the population has not advanced very far, and the proportion in the younger age groups is still very large. In England and Wales, for example, according to estimates for 1939, 21 per cent of the population was in the age group 0-14 years and 24 per cent in the age group 15-29 years. On the other hand, the population 60 years and over constituted 15 per cent of the total. In France, the census of 1936 showed that 25 per cent of the population was in the age group 0-14 years and 21 per cent in the age group 15-29 years, while again 15 per cent of the population was found to be 60 years of age and over. In Canada in 1941 the percentage of population in the age group 0-14 was 27·8, that in the group 15-29 was 27·1, while only 10·2 per cent was in the group 60 years of age and over.

The change in the age and sex composition of the Canadian population which took place from 1911 to 1941 is indicated in the table on the following page.

POPULATION BY AGE GROUPS, AND SEX RATIO, 1911, 1921, 1931 AND 1941

	1911		1921		1931		1941	
	Number (000's)	Per Cent	Number (000's)	Per Cent	Number (000's)	Per Cent	Number (000's)	Per Cent
Age Group:								
0-14	2,383	33·1	3,026	34·4	3,282	31·6	3,199	27·8
15-29	2,055	28·5	2,205	25·1	2,738	26·4	3,119	27·1
30-44	1,420	19·7	1,817	20·7	2,044	19·7	2,280	19·8
45-59	834	11·6	1,080	12·3	1,441	13·9	1,734	15·1
60-74	406	5·6	530	6·0	698	6·7	932	8·1
75-	109	1·5	130	1·5	174	1·7	243	2·1
Total	**7,207**	**100·0**	**8,788**	**100·0**	**10,377**	**100·0**	**11,507**	**100·0**
Sex Ratio:								
Males to 100 Females	112·9		106·4		107·4		105·3	

The age distribution of the population is of special relevance in the study of public health statistics, in which death rates are frequently shown per 1,000 or 100,000 population. In comparing the general death rate in different areas it is useful to bear in mind that part of the differences observed may be due to the differences in the age distribution of the population. Low death rates in a particular area may be due to the favourable age distribution of the population, in which the younger age groups with a very low mortality rate are heavily represented, whereas the older age groups with high mortality rates are relatively small in numbers. Thus, while mortality rates at each age of life will no doubt continue to decline, the ageing of the population will probably not only arrest the further decline in the general death rate, but cause it gradually to rise.

New problems in disease prevention and treatment have arisen as a consequence of the alteration in the age distribution of the population. While the causes of death commonly associated with the early years of life have to a considerable extent been brought under control and have declined, the ageing of the population tends to thrust to the fore those causes commonly associated with advanced years. Cancer, nephritis and diseases of the heart are three of the important causes of death affecting mainly older people which now account for a substantially greater proportion of all deaths than in the past.

The age of the population not only affects the character of health problems themselves, but it also has a direct effect on the question of economic support for health services. The capacity to maintain and improve these services depends to a large degree on the number of active, healthy individuals in the economically productive age groups.

These factors vary from province to province, and from time to time in the same province, as population change occurs through internal migration in relation to the economic distribution of opportunity. This results in marked differences in the age distribution in different parts of the country which have developed progressively with the concentration of industry and the continuously increasing urbanization accompanying this economic change.

Population changes which have taken place as the economic organization of the country has been modified, have been reflected in wide variation between provinces in the character of health problems and in the basis of economic support for health services.

Health needs tend to be greatest where capacity to support services is least. This has made the provision of uniformly high standards of municipally-financed services difficult in all provinces, while the variation in fiscal capacity between the provinces themselves has impeded the development of equally comprehensive health services throughout the country.

Provincial governments, constitutionally responsible for the actual provision of health services, have had to bear the full burden of cost, although the population changes fundamental to many of the health problems have taken place without regard to political boundaries.

At the same time, the maintenance of productivity through safeguarding the health of the people is a matter of national concern. Although, in the long run, over the whole country, health services may be expected to pay for themselves in terms of increased productivity, population change between provinces makes it necessary for those areas losing population of productive ages to pay more than their share for services in terms of their own return.

This situation emphasizes the national interest in the health of individuals in all provinces.

Health services form an integral part of national social and economic policy, the objectives of which depend in large part on high standards of health. The maintenance of high levels of employment and income, and the development of a comprehensive social security programme require a healthy population and more and better health services.

PROPOSED NATIONAL HEALTH PROGRAMME

The national health programme proposed at the Dominion-Provincial Conference of 1945 and modified at the meetings of January and April 1946, was based on recognition of the national interest in the health of all Canadians. Full provincial responsibility for administration was fundamental to the proposals advanced. They included financial assistance to the provinces in establishing health insurance to provide health services to individuals, health grants to assist and extend public health and preventive medicine, a grant for organization and planning, and provision for low-interest loans for the construction of hospitals.

The health insurance proposals and the other health grants are described in succeeding sections of this Reference Book.

The Planning and Organization Grant proposed by the Dominion Government was to be made available to provincial governments so that they might establish planning staffs to study and report on the requirements of the Province in the field of essential medical, hospital and related services. The amount of the grant to any province was to be $5,000 plus 5 cents per capita of its 1941 population, but not less than $15,000. The grant, which was to have been spent within two years, was to be distributed as shown in the following table:

PROPOSED PLANNING AND ORGANIZATION GRANT

(thousands of dollars)

Province	Estimated amount of grant
Prince Edward Island	15·0
Nova Scotia	33·9
New Brunswick	27·9
Quebec	171·6
Ontario	194·4
Manitoba	41·5
Saskatchewan	49·8
Alberta	44·8
British Columbia	45·9
Total cost to the federal government	624·8

This revision of the Health Reference Book follows the form of the original volume, which was based on broad groups of health services and the division of responsibility between different government authorities.

After a brief summary of the health programme of Dominion, provincial and local governments, consideration is given first to services relating to the whole health programme. This is followed by an examination of general public health services and a series of sections dealing with special services in the various health fields. The general hospital system and public medical care services are then described, and the final section in the Reference Book is devoted to an examination of health insurance programmes.

Throughout the book, totals shown on tables are exclusive of Yukon and Northwest Territories.

2. HEALTH ADMINISTRATION

DIVISION OF RESPONSIBILITIES

Jurisdiction respecting public health is based upon the British North America Act, 1867, and all health activities are conducted within the limitations of the statutory jurisdiction laid down by that Act. To the Dominion Government was assigned jurisdiction over "quarantine and the establishment and maintenance of marine hospitals" (Sec. 91, ss. 11), and to the provinces "the establishment, maintenance and management of hospitals, asylums, charities and eleemosynary institutions in and for the provinces, other than marine hospitals" (Sec. 92, ss. 7). But the residuary power for public health has been generally accepted as being in the province by virtue of provincial jurisdiction over "property and civil rights in the province" and "generally all matters of a merely local or private nature in the province" (Sec. 92, ss. 13 and 16).

This constitutional division of responsibility has resulted in the development of a limited programme of health activities by the Dominion government, and extensive programmes in all the provinces, with local authorities carrying out certain basic functions in health administration and sharing in provincial programmes. Coordination of services has been facilitated by the activities of the Dominion Council of Health and the Vital Statistics Council of Canada.

DOMINION ACTIVITIES

From Confederation until the year 1872 Dominion health activities were under the control of the Department of Agriculture. Later, the administration was divided among the Departments of Marine and Fisheries, Agriculture and Inland Revenue. Operating under the Conservation Commission was the National Council on Health, which advised the Federal and Provincial Governments on matters relating to public health. Various national organizations interested in health matters passed resolutions and memorialized the Government for the creation of a Department of Health, and on numerous occasions a motion was introduced into the House of Commons "for a select standing committee on the subject of vital statistics and public health". In 1919 the Federal Department of Health was created by Act of Parliament, and in 1928 this Department was merged with the Department of Soldiers' Civil Re-establishment to create the Department of Pensions and National Health. In 1944 the latter department was dissolved, veterans health services transferred to the Department of Veterans Affairs, and the new Department of National Health and Welfare created.

Most of the Dominion health services have now been centralized within this Department, although a number of related functions are carried out by other departments.

One fundamental aspect of health administration in Canada is related to the Dominion Government's responsibility for international relations. Canada was the first nation in the world to ratify its adherence to the World Health Organization, one of the international agencies being developed by the United Nations.

The international health obligations undertaken by Canada include:

(1) Signatory to the International Convention of Paris, 1926, implementing quarantine regulations and provisions of the Convention, and signatory to these treaties as amended under authority of United Nations Relief and Rehabilitation Administration, that is, International Sanitary Convention 1944, and International Sanitary Convention for Aerial Navigation, 1944. Control over these Conventions of 1944 will probably be transferred to the World Health Organization within a short time.

(2) Membership in the "Office Internationale d'Hygiene publique" for the purpose of collection and dissemination of information regarding infectious diseases. It is anticipated that these activities will also be taken over by the World Health Organization.

(3) Membership in the International Union against Cancer and Venereal Diseases.

(4) Participation in the International Agreement of Brussels—treatment of seamen suffering from venereal diseases.

(5) Representation on the Opium Advisory Committee of the League of Nations—control of the importation, manufacture and sale of narcotics.

(6) Custodian and distribution centre of biological, vitamin and hormone standards for the League of Nations.

(7) Agreement with the United States Public Health Service and other government agencies in the United States covering public health matters, including duplicate pratique, the exportation of shellfish and the supervision of water supplies on vessels plying the Great Lakes and on common carriers in international service.

(8) Participation in the International Convention for a Joint List of the Causes of Death.

(9) Participation in the international committee for the preparation of a classification of diseases.

Canada's share in implementing these agreements is carried out by the various government agencies concerned. Most of these are divisions in the Department of National Health and Welfare.

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Department of National Health and Welfare

Health activities of the Department of National Health and Welfare may be divided into three broad categories:

1. Actual health services relating to international agreements and national government, including health programmes for groups of people for whom the Dominion has special responsibility. These services, administered by four divisions in the Department, include the following programmes:

   Quarantine, Immigration Medical and Sick Mariners' Services
   Public Health Engineering
   Indian Health Services
   Civil Service Health

2. Regulating the distribution and sale of food products, drugs and medicines. These aspects of the Dominion government health programme are carried out through the following departmental divisions:

   Laboratory of Hygiene
   Food and Drugs
   Proprietary or Patent Medicine
   Advertising and Labels
   Narcotic Drugs

3. Programmes relating to national health problems where the main responsibility for actual services rests with provincial authorities. Divisions which are responsible for programmes of this kind, and for consultant services to other Dominion government departments, include:

   Venereal Disease Control
   Blindness Control
   Child and Maternal Hygiene
   Industrial Health
   Nutrition Services
   Mental Health
   Dental Health
   Hospital Design

In addition, certain phases of the work of the Department are performed jointly for the Health and Welfare branches. Among these are the departmental library, social research, and centralized publicity and information services, including public health education through radio, literature, and other mass media.

Activities of Other Dominion Departments

In addition to the activities of the Department of National Health and Welfare, other Dominion departments are concerned with public health matters. Statistical services in relation to Canadian public health and welfare are carried out through the Dominion Bureau of Statistics; a medical research programme is being developed under the auspices of the Medical Research Division in the National Research Council; the Department of Agriculture has extensive responsibilities in connection with food control; and the Department of Mines and Resources, in operating national parks, is responsible for environmental sanitation.

PROVINCIAL AND LOCAL ACTIVITIES

Extensive health programmes have been developed by public authorities in all provinces, with responsibility for the actual services being shared between provincial and local governments.

Provincial Services

Provincial health activities are conducted by Departments or Boards of Health. Five provinces, Nova Scotia, Quebec, Ontario, Saskatchewan and Alberta have separate Departments of Health or Public Health. In Prince Edward Island the work is carried out through the Department of Health and Welfare; in New Brunswick through the Department of Health and Social Services; in Manitoba through the Department of Health and Public Welfare; and in British Columbia through the Department of Health and Welfare and that of the Provincial Secretary. Most of the provinces have a Provincial Board of Health, or an equivalent, to act in an advisory capacity, although in Alberta the Board has a more positive role with executive and administrative authority.

These provincial health authorities supervise municipal programmes, provide basic services in areas without municipal organization, and share with local authorities the responsibility for such services where health units have been organized. This work, most of which relates to the fundamental public health services, is administered in different ways in the various provinces. It commonly includes the provision of central head office services, consultant service relating to local programmes, and the administration of actual regulations governing local services.

Separate administrative divisions in the provincial departments are usually responsible for the various phases of the work. The following list of divisions indicates the general scope of these provincial activities:

Communicable Disease Control
Maternal and Child Hygiene
Public Health Nursing
Vital Statistics
Laboratories
Public Health Engineering
Industrial Hygiene
Dental Service

Another group of provincial services is concerned with preventive programmes developed in respect to certain health problems of special public interest, and with the administration or supervision of actual treatment programmes. This work is carried out by divisions concerned with:

Tuberculosis Prevention
Venereal Disease Control
Mental Health
Cancer

Provincial health departments also supervise or administer general hospital facilities, and are generally responsible for over-all planning to safeguard and improve the health of the people in their particular province. Public medical care programmes are usually

TABLE 1.—HEALTH ACTIVITIES OF PROVINCIAL DEPARTMENTS

(SOURCE: Provincial Departments of Health)

PRINCE EDWARD ISLAND

- Minister of Health and Welfare
- Deputy Minister of Health and Welfare
- Chief Health Officer
- Vital Statistics
- Communicable Disease Control
- Tuberculosis Control
- Venereal Disease Control
- Laboratories
- Sanitation
- Public Health Nursing
- Public Health Education
- Dental Hygiene
- Sanatorium Commission
  - Provincial Sanatorium
  - Provincial Hospital for the Insane

NOVA SCOTIA

- Minister of Health
- Deputy Minister
- Central Administration
- Vital Statistics and Epidemiology
- Laboratories
- Venereal Diseases
- Physical Fitness and Nutrition
- Sanitary Engineering and Sanitation
- Health Units
  - Acute Communicable Disease, Tuberculosis and Venereal Diseases
  - Sanitation
  - Public Health Nursing
  - Maternal, Child and School Hygiene
- Provincial Hospitals
  - Cancer Clinic
  - Victoria General Hospital
  - Nova Scotia Sanatorium
  - Nova Scotia Hospital
  - Inspection of Local Hospitals

NEW BRUNSWICK

- Minister of Health and Social Services
- Chief Medical Officer and Registrar General
- Vital Statistics
- Laboratories
- Venereal Disease Control
- Nutrition Services
- Public Health Nursing
- Health Districts
  - District Medical Officers
  - School Medical Inspection
  - School Nursing Inspection
  - Communicable Diseases and Tuberculosis
  - Sub-District Boards of Health
  - Sanitary Inspection
  - Food Inspection
- Provincial Hospitals
  - Provincial Tuberculosis Hospitals
  - Provincial Mental Hospital

QUEBEC

- Minister of Health
- Deputy Minister
- Assistant Deputy Minister
- Administration
- Demography
- Epidemiology
- Venereal Diseases
- Laboratories
- Sanitary Engineering
- Public Health Education
- Industrial Hygiene
- Mental Hygiene—Insane Asylums
- Nutrition
- Publicity
- Tuberculosis Clinics, Dispensaries, etc.
- Director of Services
- Public Health Units and Districts
- Legal Adviser
- Medical Service to Settlers
- Hospital Administration

ONTARIO

- Minister of Health
- Deputy Minister and Chief Medical Officer of Health
- Assistant Deputy Minister
- Assistant Chief Medical Officer
- Hospitals Division (Mental Hygiene and Ontario Hospitals)
- Industrial Hygiene
- Tuberculosis Prevention
- Venereal Disease Control
- Sanitary Engineering
- Laboratory
- Public Health Nursing
- Nurse Registration
- Public Health Administration
- Epidemiology
- Dental Services
- Maternal and Child Hygiene
- Inspector of Hospitals (Public and Private)
- Business Administrator
- Library
- Health Centre
- Medical Statistician
- Vital Statistics (Registrar General)

MANITOBA

- Minister of Health and Public Welfare
- Deputy Minister
- Board of Health
- Director of Health
- Section of Administration
  - General Administration
  - Statistics and Records
  - Laboratories
  - Health and Welfare Education
  - Administrative Research
- Section of Environmental Sanitation
  - Public Health Engineering
  - Industrial Hygiene
  - Food and Milk Control
- Section of Preventive Medical Service
  - Disease Control (including venereal diseases)
  - Maternal and Child Health
  - Public Health Nursing
- Section of Extension of Health Service
  - Includes Hospitalization
- Section of Local Health and Welfare Service
  - Advisory Field Staff
  - Local Health Departments
- Division of Psychiatry
  - Psychiatry
  - Mental Institutions
  - Mental Hygiene

SASKATCHEWAN

- Minister of Public Health
- Health Services Planning Commission
- Deputy Minister
- Cancer Commission
- Administration
- Vital Statistics
- Communicable Disease
- Venereal Disease Control
- Laboratories
- Sanitation
- Public Health Nursing
- Health Education
- Physical Fitness and Recreation
- Medical Services
- Hospital Administration
- Mental Hygiene
- Nutritionist
- Industrial Hygiene

ALBERTA

- Minister of Health
- Provincial Board of Health
- Deputy Minister of Health
- General Administration
- Vital Statistics
- Communicable Diseases
- Tuberculosis—Clinics, Sanatoria and Surveys
- Social Hygiene
- Provincial Laboratory
- Sanitary Engineering
- Public Health Nursing, Maternal and Child Hygiene
- Public Health Education
- Dental Hygiene
- Hospital Inspection.
- Mental Health
- Guidance Clinics
- Eugenics Board
- Entomology—Surveys
- Cancer Services
- Institutions
  - Mental Hospitals and Training Schools
  - Central Alberta Sanatorium

BRITISH COLUMBIA

- Minister of Health and Welfare
- Deputy Minister of Health
- Bureau of Administration
- Division of Vital Statistics
- Division of Tuberculosis Control
- Division of Venereal Disease Control
- Division of Laboratories
- Division of Public Health Engineering
- Division of Public Health Education
- Bureau of Local Health Services
  - Public Health Nursing
  - Local Health Officers
  - Health Units
  - School Medical Services
  - Preventive Dentistry
- Nutrition
- Hospital Administration
- Provincial Mental Hospitals

administered by welfare authorities. The agency responsible for administering hospital grants varies from province to province.

The scope of the programme in effect in each province is indicated in Table 1, which shows the health activities of each provincial government.

Local Services

The extent of local responsibility varies widely, but municipalities in most provinces provide a range of basic public health services and participate in the costs of hospital care for persons who fulfil residence requirements. In some provinces local health services are organized through units developed on the basis of counties or other combinations of local government areas. While the programme administered through health units has hitherto been largely confined to public health services, recent trends have been toward coordinating this development with that of personal health services, including medical care.

The scope of the programme in effect in larger centres is indicated by the following list of activities:

Communicable Disease Control
Food and Milk Control
Sanitation and Housing
Health Education
Maternal, Infant and Child Hygiene (including Dental Hygiene)
Adult Hygiene (including Industrial Hygiene)
Laboratory Services
Vital Statistics and Records
Administration of Hospital Grants
Medical Care of Indigents

THE DOMINION COUNCIL OF HEALTH

This body is responsible for correlating and coordinating provincial and Dominion public health activities. It comprises the Chief Medical Officer of Health of each of the provinces, one scientific adviser, and four lay persons representing, respectively, labour, agriculture, and women's urban and rural organizations. The Deputy Minister of National Health is chairman.

The national health plan proposed by the federal government at the Dominion-Provincial Conference of 1945 included provisions whereby the Dominion Council of Health would be given power to advise the Dominion government with respect to the administration of grants to the provinces.

THE VITAL STATISTICS COUNCIL FOR CANADA

The Council was established to facilitate cooperation between Dominion and provincial governments with respect to the use of vital records and statistics, and to ensure the creation and maintenance of a system that is adequate to meet increasing demands both for Dominion and provincial purposes. The Dominion Statistician is the Chairman and the Council comprises one representative for each province, who is the official actively in charge of the provincial vital statistics office, one for Yukon and the Northwest Territories and the Chiefs of Vital Statistics and Census Branches in the Dominion Bureau of Statistics.

Sources:
Department of National Health and Welfare:
Dr. G. D. W. Cameron, Deputy Minister of National Health.
Department of Veterans Affairs:
Dr. C. C. Misener, Treatment Branch.
Provincial Departments of Health.

3. STATISTICS, RESEARCH AND PROFESSIONAL TRAINING

The development of Canadian health services has been accompanied by the growth of certain functions related to the whole programme carried out by federal, provincial and local health authorities. These services include the collection, compilation and distribution of vital statistics as well as statistics relating to public health and the administration of all types of hospital care programmes; the organization and administration of research programmes related specifically to the medical and the social aspects of health services; and the training of professional personnel. Laboratory services and health education also relate to the whole health programme, but since they have been developed as part of the basic public health programme, they are discussed in the section on General Public Health.

STATISTICS

Three broad types of statistical service have been developed in relation to Canadian health programmes. They represent joint efforts by Dominion, provincial, local and voluntary agencies working the the general fields of vital statistics, health and hospital care.

Vital Statistics, in the traditional sense, is based on the registration of births, deaths and marriages in the places in which these events occur. These records are then filed with provincial authorities and made available through them to the national Vital Statistics office in the Dominion Bureau of Statistics, where they are classified on the basis of residence. This provides data for that study of the Canadian population which is essential to all health services.

Out of the nation-wide vital statistics system has developed the National Index of Vital Records. This index is fundamental to the administration of the national family allowance programme. As it progressively includes more and more of the population it provides a means whereby the scientific study of population trends and social policy may be undertaken.

Statistics of notifiable diseases reported to local health departments and to provincial authorities are forwarded weekly to the Dominion Bureau of Statistics where they are compiled on a comparable basis for all provinces and made available within twelve days to health authorities in all parts of the country.

Annual statistics covering the operation of tuberculosis and mental institutions as well as general public (acute disease) hospitals are also compiled by the Dominion Bureau of Statistics. These series of publications furnish data for comparison of hospital care facilities and services provided in the various provinces.

RESEARCH

Medical research is carried out for the most part through universities and "teaching" hospitals, sometimes in association with endowed institutions. During the war years the Dominion government undertook the promotion of medical research through an Associate Committee of the National Research Council. The work undertaken under this committee was transferred to a permanent organization, the Division of Medical Research, established by the Council in June 1946. Under this organization, the Council is continuing its support of medical research in existing medical schools and hospitals throughout Canada, rather than through the establishment of medical research laboratories and appointment of medical research workers under its own auspices.

Public health research in Canada has not been very comprehensive. Few provincial departments have been able to give it much attention, and relatively little was done by the federal Department of Pensions and National Health.

Research is carried out by the Department of National Health and Welfare, and by provincial departments, in relation to the various health services. While no federal funds are made available to the Department of National Health and Welfare for the specific purpose of conducting public health research, the extension of laboratory services has led to the development of fairly comprehensive research activities incidental to this phase of health administration.

To a degree, a similar situation prevails in the provinces, and cooperative working arrangements exist between federal and provincial authorities in connection with laboratory research.

The national Laboratory of Hygiene performs work it is uneconomical for nine provincial laboratories to undertake independently. Conferences of laboratory directors are held annually so that duplication of effort may be avoided.

An illustration of inter-governmental co-operation may be found in the work of the federal government and the governments of British Columbia, Alberta and Saskatchewan in conducting surveys to determine the distribution of the infectious agents of Rocky Mountain Spotted Fever and plague. Laboratory work for these surveys is carried out by the Kamloops branch of the federal Laboratory of Hygiene.

Research in nutrition is carried out in a number of provinces and by Dominion health authorities.

This is also the case with industrial hygiene. The programme of the federal Division includes field surveys of hazardous trades, a limited number of chemical and ecological studies in Ottawa, and assistance to provincial governments in organizing industrial health laboratories.

Proposals made at the Dominion-Provincial conference of 1945 included an annual grant of $100,000 for advancement of public health research in the provinces.

Research into the social and economic aspects of health services is carried on by the Research Section of the Department of National Health and Welfare.

PROFESSIONAL TRAINING

In their submission to the Select Committee on Social Security of the House of Commons and to the Advisory Committee on Health Insurance many of the professional groups have pointed out the need for additional trained personnel in the extension of public health services and for the introduction of health insurance.

PHYSICIANS

Information respecting the supply and distribution of physicians in Canada as at July 1, 1946, has been compiled by the Department of National Health and Welfare on the basis of a previous survey conducted by the Canadian Medical Procurement and Assignment Board.

General Trend—The number of physicians in Canada rose by 60 per cent in the 35 years, 1911-1946. While this was a substantial increase, the supply barely kept pace with the growth of the population.

It will be noted that remarkably little change occurred in the population-physician ratios during this 35-year period. The fact that such a ratio is now the same as or different from what it was twenty or thirty years ago does not in itself reveal the true situation. It must be considered along with other factors. For instance, transportation facilities have greatly improved, and a physician can now cover any given area more readily than he could in the past. On the other hand, the per capita demand for medical care is greater than it was formerly.

The distribution of Canadian physicians as between provinces did not alter greatly over the period. Ontario and British Columbia had the smallest population to be served by each doctor, followed by Quebec and Manitoba. The largest number of people per physician was found in Saskatchewan and New Brunswick. In recent years proportionately fewer physicians have been entering practice in the Maritimes, more in the Prairie Provinces.

The distribution of physicians by provinces, along with the average population per physician, is shown in Table 2 for census years from 1911, and for 1946. There were 1,150 active physicians in the armed forces as at June 2, 1941, 3,854 as at June 30, 1945, and 1,417 as at June 30, 1946. Table 2 shows civilian doctors only.

While Table 2 shows the location of physicians in relation to population by provinces, it does not reflect the concentration of doctors in the larger urban communities. This has been a consequence of the development of modern scientific medicine and the trend toward urbanization in Canada.

The distribution of physicians in relation to the size of the community in which they practise is illustrated in Table 3, which shows the average number of people per physician for cities over 150,000, those between 30,000 and 150,000, those between 10,000 and 30,000, and for all other communities.* Since very few doctors are normally located in the residential suburbs of large cities, and the medical needs of these surrounding districts are usually met by city physicians, the population and number of doctors for larger metropolitan areas were used in preference to the totals for the cities proper. (See footnote to Table 3.)

About 43 per cent of Canada's doctors were concentrated in the seven urban areas with a population of more than 150,000. It was found that the large cities all across the country showed a fairly consistent relationship between population and number of resident doctors, with the Dominion ratio standing at 665.

Some 15 per cent of all Canadian physicians practised in cities between 30,000 and 150,000 population, with Ontario and Saskatchewan cities very well provided and Quebec below the Dominion average, which worked out at 669 people per physician, almost identical with the

TABLE 2.—PHYSICIANS AND POPULATION IN CANADA AND THE PROVINCES, CENSUS YEARS 1911 TO 1941, AND 1946

—	1911		1921		1931		1941		1946	
	Physicians	Population per Physician	Physicians	Population per Physician	Physicians	Population per Physician	Physicians	Population per Physician	Physicians	Population per Physician[1]
CANADA	7,411	970	8,706	1,008	10,020	1,034	10,723	1,072	11,901	1,017
Prince Edward Island	72	1,302	68	1,303	63	1,397	67	1,419	74	1,243
Nova Scotia	408	1,207	457	1,146	445	1,152	428	1,350	492	1,262
New Brunswick	281	1,252	268	1,447	269	1,518	270	1,694	293	1,597
Quebec	2,000	1,003	2,216	1,065	2,747	1,046	3,162	1,054	3,334	1,068
Ontario	3,053	828	3,459	848	3,934	872	4,197	902	4,752	843
Manitoba	433	1,066	557	1,095	666	1,051	659	1,107	706	1,042
Saskatchewan	379	1,299	524	1,446	584	1,578	527	1,700	562	1,504
Alberta	369	1,014	548	1,074	583	1,255	603	1,320	676	1,222
British Columbia	416	943	609	861	729	952	810	1,010	1,012	938

[1] Based on 1945 population estimates of the Dominion Bureau of Statistics.

* Most of the urban population totals are for 1945, the latest year available, and the general provincial population-physician ratios shown in Table 3 are based on 1945 population estimates for the sake of comparability. As stated in Footnote (1) to Table 3, 1945, figures were not available for certain centres in Quebec and New Brunswick, earlier returns being used in these cases.

TABLE 3—POPULATION OF CANADIAN URBAN COMMUNITIES OVER 10,000 AND OTHER AREAS, IN REATION TO THE NUMBER OF PHYSICIANS.[1]

	Urban Communities									Other Communities			Total		
	Over 150,000			30,000–150,000			10,000–30,000								
	Population	Physicians	Population per Physician	Population[2]	Physicians	Population per Physician	Population	Physicians	Population per Physician	Population	Physicians	Population per Physician	Population	Physicians	Population per Physician
CANADA	3,398,268	5,114	665	1,199,309	1,794	669	839,814	980	857	6,664,609	4,013	1,661	12,102,000	11,901	1,017
Prince Edward Island	.....	.....	.....	.....	.....	.....	15,500	27	574	76,500	47	1,628	92,000	74	1,243
Nova Scotia	.....	.....	.....	149,765[3]	186	805	46,272	32	1,446	424,963	274	1,551	621,000	492	1,262
New Brunswick	.....	.....	.....	70,455[4]	94	750	41,661	61	683	355,884	138	2,579	468,000	293	1,597
Quebec	1,390,268[5]	1,934	719	120,261	117	1,028	258,030	233	1,107	1,792,441	1,050	1,707	3,561,000	3,334	1,068
Ontario	1,286,438[6]	2,083	618	464,795[7]	829	561	375,436	503	746	1,877,331	1,337	1,404	4,004,000	4,752	843
Manitoba	304,812[8]	471	647	.....	.....	.....	17,415	24	726	413,773	211	1,961	736,000	706	1,042
Saskatchewan	.....	.....	.....	99,547	209	476	35,000	42	833	710,453	311	2,284	845,000	562	1,504
Alberta	.....	.....	.....	208,986	257	813	29,000	37	784	588,014	382	1,539	826,000	676	1,222
British Columbia	416,750[9]	626	666	85,500[10]	102	838	21,500	21	1,024	425,250	263	1,617	949,000	1,012	938

[1] Population figures for urban centres (with certain exceptions in Quebec and New Brunswick), are those shown for 1945 in the reports of the Citizens' Research Institute, and are based on municipal reports.
[2] 1945 Estimate of the Dominion Bureau of Statistics.
[3] Halifax, including Dartmouth.
[4] Saint John including Lancaster and Simonds.
[5] Includes metropolitan area of Montreal*.
[6] Includes metropolitan area of Toronto*.
[7] Includes metropolitan area of Windsor*.
[8] Includes metropolitan area of Winnipeg*.
[9] Includes metropolitan area of Vancouver*.
[10] Victoria, including Saanich and Oak Bay.
* Metropolitan areas as defined in *Comparative Statistics of Public Finance* of the Dominion-Provincial Conference.

"larger centres" ratio. Just over 8 per cent of the country's doctors were located in urban centres of between ten and thirty thousand, with distribution fluctuating even more markedly between provinces. Nova Scotia, Quebec and British Columbia showed the largest population in relation to the number of doctors in this group.

Ratios calculated for all urban communities over 10,000 were found to vary relatively little from a Dominion average of 689.

Communities under 10,000, where approximately 55 per cent of Canadians resided, were served by only 35 per cent of the country's physicians. Scarcity of doctors in these smaller communities was most acute in New Brunswick and Saskatchewan, and least so in Ontario. Other provinces were fairly close to the Dominion average. In some provinces, measures are being taken to encourage doctors to practise in smaller communities and rural areas.

Future Supply of Physicians—The future supply of physicians in Canada will be determined by a number of factors including the output of medical schools, immigration and emigration, the repatriation of foreign-born students, deaths and retirements.

Output of Canadian Medical Faculties—The supply of physicians in Canada is primarily dependent upon the facilities in the country for educating and training physicians. At the present time there are nine medical faculties from which doctors are graduated.

The National Health Survey of 1943 reviewed the trend of the output of these medical schools over the past twenty-five years. An average of 526 students graduated annually from these nine medical schools during the twenty year period 1925 to 1944, while in the four-year period 1936 to 1939 an average of 491 students graduated annually.

Table 4 provides information on the number of graduates in the years 1940 to 1948. Figures for 1947 and 1948 are estimates.

TABLE 4.—NUMBER OF GRADUATES OF CANADIAN MEDICAL FACULTIES, 1940-1948

University	1940	1941	1942	1943	1944	1945	1946	1947[1]	1948[1]
Alberta....	35	37	46	69	36	32	41	—	33
Dalhousie..	35	42	42	73	33	43	—	35	35
Laval.....	49	51	67	101	66	65	104	105	105
Manitoba..	45	62	54	51	62	110	63	—	50
McGill....	162	86	89	191	96	101	2	103	110
Montreal..	48	53	51	103	45	56	—	78	80
Queen's...	58	44	39	93	40	44	40	46	46
Toronto...	138	138	114	209	127	120	135	129	123
Western...	29	30	36	61	37	33	38	35	40
Total.....	**599**	**543**	**538**	**951**	**542**	**604**	**423**	**531**	**622**

[1]Estimated number of graduates.

A comparison of the average output for the four pre-war years (491 students annually), with the corresponding figure for 1940-1945 (629 graduates annually) indicates the wartime increase in the number of medical graduations.

During the war, the supply of physicians was temporarily increased by an accelerated training programme. Reduced vacation periods in medical schools resulted in a substantially larger number of graduations for 1943. There was little increase in enrolment, however, approximately the same number of students being trained as formerly, in a shorter period of time.

The additional increment of qualified doctors graduated during the war is being partially offset at present. There were no medical graduates from Dalhousie and McGill Universities in 1946. In 1947, Alberta and Manitoba medical faculties will have no graduates. The total Canadian output of newly qualified physicians was thus reduced to 423 in 1946, and will rise only to 531 for the following year. In 1948, however, it will be 622.

Immigration and Emigration—The National Health Survey estimated the loss of trained medical personnel in pre-war years through the repatriation of foreign-born students to be between 5 and 10 per cent of the output of Canadian medical schools. A large proportion of these students return to their own country after graduation. Their number has been slightly lower during the war years.

The National Health Survey pointed out that there is a considerable amount of emigration among Canadian physicians, especially recent graduates. The number of immigrant doctors has always been less than the number emigrating. Accordingly, in pre-war years, there was a drift of physicians away from Canada, roughly estimated at the equivalent of 10 per cent of medical school output.

The application of labour exit permit control in October, 1942, designed to prevent persons essential to the war effort from leaving Canada, checked this development. Since that time movement of doctors into and out of Canada has been small. However, if the pre-war trend is resumed, there will be a considerable loss of physicians through emigration.

Retirements—The National Health Survey showed 6·6 per cent of all civilian physicians as having retired. It would appear that very little change has taken place in the size of the retired group, since records available for July, 1945, indicate that 6·1 per cent of civilian physicians were retired.

Deaths of Physicians—The annual average death toll among Canadian physicians for the five-year period 1940-1944 was 223.

Public Health Personnel

Approximately 2,734 trained public health workers are employed by federal, provincial and local agencies. As indicated in Table 5, more than half of these are public health nurses, the remainder being fairly evenly distributed between physicians, sanitary inspectors and laboratory technicians.

The federal government employs 98 physicians, and 130 technicians in its various laboratories. About two-thirds of the remaining public health physicians are attached to municipal units. Most public health nurses and sanitary inspectors also belong to preventive units organized on a local basis. In many cases, however, such personnel are in fact employees of the provincial

TABLE 5.—PUBLIC HEALTH PERSONNEL EMPLOYED IN CANADA, 1946

—	Dominion	Provinces[1]	Cities[1]	Health Units[1]	Total
Physicians	98	128	104	136	466
Public Health Nurses	15	211	608	558	1,392
Sanitary Inspectors	—	10	272	155	437
Public Health Engineers	13	24	—	—	37
Laboratory Technicians	130	272[2]	—	—	402
Total	**256**	**645**	**984**	**849**	**2,734**

[1] It is estimated that these figures represent 98 per cent of the total number of non-federal agencies employing public health personnel.
[2] Including those employed on a combined provincial-city or provincial-university basis.

governments. A great many of the laboratory technicians shown in the "provincial" column are engaged under provincial-city or provincial-university agreements.

Training of public health personnel in Canada has been steadily supported, since 1924, by the International Health Division of the Rockefeller Foundation, which made possible the opening of the School of Hygiene at Toronto in 1927, and has granted 166 fellowships for post-graduate training in Public Health to physicians and nurses from all the provinces. Travel grants have also been made available to members of health departments and to university instructors.

Nurses

Compulsory registration of all nurses in Canada in March 1943 provided an accurate record of the number, education and occupational classification of all members of that professional group. The Canadian Nurses Association has compiled information based on the registration itself and related statistical data.

In March 1943 there were 52,450 graduate nurses in the nine provinces of Canada, of whom 22,122 were actively practising their profession. Ninety-four per cent of the remainder were occupied as housewives. Nurses in the armed forces were excluded from the registration.

The distribution by provinces, and according to major fields of nursing, is indicated in Table 6. Student nurses and auxiliary nursing personnel, such as ward aides, and practical nurses, are not included.

Table 6 indicates that almost half the active graduate nurses were engaged in hospital nursing service or in schools of nursing. In reality, the proportion was probably higher because many of those classified as private duty nurses were actually employed as "special nurses" caring for individual patients in hospitals.

The hospital group itself includes those employed as administrators of nursing service, clinical instructors, supervisors, head nurses and general duty nurses giving actual bedside care to hospitalized patiients.

TABLE 6.—NURSES EMPLOYED IN MAJOR FIELDS OF NURSING[1], AS AT MARCH 1943

—	Private[2]	Hospitals and Schools	Industrial Nursing	Public Health[3]	Other Professional Fields	Unspecified	Total	Population per Practising Nurse
CANADA	6,327	10,705	1,356	1,885	1,799	50	22,122	533
Per cent	28·6	48·4	6·1	8·5	8·2	0·2	100·0	
Prince Edward Island	71	34	—	6	8	1	120	758
Nova Scotia	358	516	22	102	69	3	1,070	567
New Brunswick	288	349	6	33	42	4	722	641
Quebec	1,126	2,002	425	590	326	6	4,475	773
Ontario	3,397	4,342	658	769	746	27	9,939	394
Manitoba	332	610	115	32	133	3	1,225	593
Saskatchewan	167	655	16	66	92	3	999	843
Alberta	204	765	49	110	174	3	1,305	607
British Columbia	384	1,432	65	177	209	—	2,267	397

[1] Excluding nurses in the armed forces.
[2] Including "special nurses" caring for individual patients in hospitals.
[3] Including those employed by visiting nursing agencies.

The hospital and school group, and private duty nurses together constituted more than three-quarters of all the practising nurses in Canada. The next largest group, which comprised but 8·5 per cent of the total, was that engaged in public health nursing. These nurses are employed in various capacities in provincial and municipal health departments, in rural health units, as school nurses, as staff members in clinics for the prevention and control of tuberculosis and other communicable diseases.

This classification of public health nurses includes those of this group who act as visiting nurses, giving bedside care and health teaching in the home. While some provinces are developing a visiting nurse service as part of a general health programme, most visiting nurses are employed by voluntary organizations such as the Victorian Order of Nurses for Canada or the St. Elizabeth Visiting Nurse Association. The respective activities of these organizations are subject to their particular regulations, but their aims bear some resemblance to those of the Victorian Order of Nurses for Canada. The Victorian Order has approximately one hundred branches, primarily concerned with providing part-time skilled nursing care and health guidance to families in their own homes. Fifty per cent of the service rendered is given free of charge, income being received from other patients or from insurance companies, and through grants of public funds and private donations. In 1945, the Order employed 451 nurses and made a total of 756,984 visits to 110,118 patients.

Industrial nurses are employed in private business firms or factories where they are responsible for emergency treatments and preventive service, and for programmes of health education and routine physical examinations. Their functions are essentially similar to those of public health nurses who are not required to give bedside care.

Public health nurses and industrial nurses together constituted less than 15 per cent of practising nurses in 1943.

TABLE 7.—COMPARISON OF THE NUMBER OF REGISTERED NURSES, 1942 AND 1945

—	Nurses Registered December 31, 1942	Nurses Registered December 31, 1945
CANADA	25,223	33,348
Prince Edward Island	118	145
Nova Scotia	1,035	1,545
New Brunswick	641	849
Quebec	4,232	5,258
Ontario	12,128[1]	16,845
Manitoba	1,539	1,794
Saskatchewan	1,218	1,513
Alberta	1,472	1,823
British Columbia	2,840	3,576

[1]Estimated.

Comparison of the number of registered nurses at December 31, 1942 and December 31, 1945, as shown in Table 7, indicates the change in the potentially active group during the three-year period. It will be noted that the number of nurses shown in Table 6 as actively practising in March 1943 was more than 3,000 less than the corresponding number of registered nurses. Most of this difference is due to inactive but registered nurses in Ontario.

The extent to which public health nursing services are available in the various provinces is indicated in Table 8, which shows the number of graduate nurses employed by public health organizations, including agencies providing visiting nursing service, in 1939 and 1945, together with the population per nurse.

TABLE 8.—NUMBER OF PUBLIC HEALTH NURSES[1] IN RELATION TO POPULATION, 1939 AND 1945

—	1939		1945	
	Number of Nurses	Population per Nurse	Number of Nurses	Population per Nurse
CANADA	1,467	7,669	2,159	5,605
Prince Edward Island	5	18,800	8	11,500
Nova Scotia	34	16,500	59	10,525
New Brunswick	25	17,880	40	11,700
Quebec	525	6,152	859	4,146
Ontario	627	5,914	799	5,011
Manitoba	45	16,133	115	6,400
Saskatchewan	30	30,200	49	17,245
Alberta	85	9,247	123	6,715
British Columbia	91	8,703	107	8,869

[1]Including those employed by visiting nursing agencies.

In comparison with a widely-accepted standard of one public health nurse for 2,000 people, no part of Canada can be said to be well supplied. Quebec comes closest to meeting this standard and Saskatchewan has the largest population to be served by each public health nurse. Manitoba showed the greatest improvement during the period.

Demand for Nursing Care

While the number of nurses has increased in relation to population, there is still a critical shortage of nurses in all parts of Canada. The demand for nursing service has never been greater: there is a marked increase in the number of patients receiving care in all types of hospitals. With improved economic conditions, more people can afford hospital care and nursing service than formerly, while the growth of prepayment plans has led to hospital care for a greater proportion of patients requiring it.

The extent of the shortage of nurses, as reported in March, 1943, is indicated in Table 9.

These absolute figures of shortages become more significant when it is realized that they apply to the hospital group alone, amounting to almost 2,000 in comparison with a total of less than 11,000 active nurses in that field (See Table 6).

TABLE 9.—SHORTAGES OF NURSES REPORTED IN MARCH, 1943

Institution or Organization	Institutions Reporting Shortages	Supervisors and Head Nurses	General Duty Nurses
Hospitals	*244*	*296*	*791*
With Schools	80	248	404
Without Schools	164	48	387
Public Health Organizations	*26*	*59*	*227*
Official	21	7	41
Voluntary	5	52	186
Mental Hospitals	*27*	*53*	*281*
With Schools	13	26	153
Without Schools	14	27	128
Sanatoria	*21*	*12*	*138*
Special Hospitals	*9*	*18*	*73*
Total	**327**	**438**	**1,510**

By 1945, in spite of the increased number of nurses, the shortage had become even more critical. This is well illustrated by the situation in Ontario, which, as indicated in Table 6, was better supplied with nurses than any other part of Canada.

In June, 1946, the provincial Department of Health conducted an enquiry into the problem of nursing personnel in Ontario. The number and types of vacancies existing in the various groups of institutions are indicated in Table 10, which includes returns from hospitals having 96 per cent of the total bed capacity in the province. All mental institutions and twelve of the thirteen sanatoria are included. Dominion government and private hospitals are excluded.

The greatest need is for general duty nurses in all types of institutions. It is most serious in mental hospitals, which reported a deficiency of 58 per cent of requirements. Almost as critical in terms of numbers, and perhaps more so in relation to community health, was the shortage in sanatoria, which reported a deficiency of 48 per cent of the general duty nurses required.

The most serious shortage of all graduate nurses was in mental institutions, where it amounted to more than 46 per cent of total requirements. Sanatoria reported a shortage of 34 per cent of graduate nurses required. For all types of nursing and auxiliary personnel, the greatest deficiency was in sanatoria. Public general hospitals were equally short of graduates and other nursing personnel.

The Canadian Nurses Association, on the basis of the 1943 survey and information subsequently obtained through questionnaires, made the following estimates, regarded by the Association as conservative, of the shortage of nurses in September 1946.

Hospital staff	7,000
Private duty nurses	1,200
Public health nurses	500
Total	8,700

To meet expanding needs, an additional 4,000 hospital nurses and 1,800 public health nurses are estimated as being required within the next three years. If the standard of one public health nurse for 2,000 people were to be approached, the demand for nurses with this special training would be much greater. The

TABLE 10.—REPORTED VACANCIES FOR NURSING PERSONNEL IN HOSPITALS IN ONTARIO BY TYPE OF PERSONNEL AND CLASS OF HOSPITAL, JUNE 1946

Type of Personnel	Public General Hospitals		Hospitals for Incurables		Sanatoria		Mental Hospitals	
	Number	Per cent of Total Requirements	Number	Per cent of Total Requirements	Number	Per cent of Total Requirements	Number	Per cent of Total Requirements
Graduate Nurses								
Administrative	26	12·7	—	—	1	4·5	6	24·0
Teaching	18	11·7	—	—	1	16·7	4	23·5
Supervisors and Head Nurses	62	5·8	3	7·1	7	8·2	30	20·0
General duty	433	20·4	19	30·6	160	48·0	310	58·1
Others	3	1·5	—	—	2	4·0	—	—
Total Graduates	*542*	*14·5*	*22*	*18·8*	*171*	*34·5*	*350*	*46·2*
Other Nursing Personnel								
Practical Nurses and Nurse Aides	84	19·5	36	13·2	32	20·3	15	5·0
Ward Aides	122	18·5	3	7·3	11	11·1	42	12·0
Orderlies	24	4·6	3	6·0	30	23·1	1	1·4
Total Others	*230*	*14·2*	*42*	*11·5*	*73*	*18·9*	*58*	*4·2*
GRAND TOTAL	**772**	**14·4**	**64**	**13·3**	**244**	**27·6**	**408**	**19·1**

shortage shown for this group is to meet present needs and plans for immediate expansion of services.

The existing shortage of professional nurses is aggravated by the shortage of doctors. In addition, nurses, more particularly student nurses, are frequently given duties properly the responsibility of ward aides and orderlies. This is a direct result of the shortage of such auxiliary nursing personnel.

Supply

Several factors must be taken into account in determining how far Canadian resources of nursing personnel can go to meet the demand in the various fields. One fundamental characteristic of the supply of nurses is variation in the length of period of service before retirement from active work, the period of active practice for graduate nurses varying widely with the demand for nursing care. While a third of all nurses graduating from Canadian schools marry within a year following graduation and large numbers marry after a longer professional career, many in both these groups continue full or part-time service if there is a demand for their services, and marriage is no longer regarded as necessarily terminating professional work.

Emigration and immigration do not have an appreciable effect on the supply of nurses available for service. Emigration to the United States was previously common, but this situation no longer obtains because of restriction on the movement of nurses out of the country. From 1939 to 1945 nurses were not permitted to leave Canada. While this restriction was lifted briefly in 1946, the demand for exit permits was so great that it was found necessary after two months, to refuse applications from nurses, and from July 1946 this policy has continued to be in effect. Immigration of nurses to Canada is not likely to be appreciable because the general shortage of nurses results in restrictions being imposed on their movement by most governments.

During the second World War, a total of 4,308 nurses served in the three branches of the armed forces. As at August, 1946, 497 were still in military service and 3,811 had been discharged. Many have undertaken post-graduate courses. It is anticpated that at least 3,000 will return to civilian practice.

Those entering the profession as graduates of schools of nursing constitute the most important factor in maintaining the supply of practising nurses. There are two types of schools: the first group, by far the more important in terms of the number of students graduated, includes the training schools conducted in 169 Canadian hospitals, providing a three-year course leading to a diploma in nursing; and the second, conducted by university schools of nursing, providing a five-year course leading to a degree and a diploma in nursing. Universities also provide post-graduate courses in public health and in other specialized nursing fields.

The number of graduates of schools of nursing for the period 1940-1945, together with estimates covering the years 1946-1949 are shown in Table 11.

This table indicates the number of nurses who have recently come into the profession and those likely to do so provided that students now in training all complete their courses at the scheduled time.

It disregards possible wastage during the training period, which is likely to be great because both the shortage of general duty nurses and the factors underlying this shortage increase the volume of work carried by student nurses during their training courses. This is one of a multiplicity of circumstances in the hospital and the community, which make student nurses discontinue their training before it is completed, while selection is restricted because of employment opportunities for those who might otherwise become nurses.

TABLE 11.—GRADUATES OF SCHOOLS OF NURSING, 1940-1949

Year	Number of graduates	Year	Number of graduates
1940	2,960	1945	3,774
1941	3,277	1946[1]	3,598
1942	3,517	1947[1]	3,744
1943	3,442	1948[1]	3,871
1944	3,528	1949[1]	4,536

[1] Estimated.

The lack of autonomy for hospital schools in developing programmes of nursing education in which hospital practice is only a part, and the economic difficulties of hospitals forced to meet rising per diem cost by having student nurses perform extra service, together constitute a problem in professional training and in hospital administration, for which no solution has yet been found. Student nurses in hospital schools now supply a minimum of 121 forty-eight hour weeks of service during their training, in return for which they frequently receive only maintenance and tuition.

Auxiliary Nursing Personnel

There is a trend toward organizing special training facilities for auxiliary nursing personnel and a growing demand that this group, which includes attendants in sanatoria and mental hospitals, ward aides, practical nurses and orderlies, be certificated and licensed, so that the public may be protected against the dangers of unlicensed practice. Manitoba has already enacted legislation requiring licensing of all hospital personnel.

Conclusion

The continually increasing demand for nursing services emphasizes the need for conserving nursing resources through maximum utilization of available personnel and through the development of auxiliary staff. Special efforts are required if the possibilities of an expanded visiting nurse service are to be realized, in terms of reducing the need for hospital care of those who are actually ill while the further development of public health nursing as a phase of preventive service is of fundamental importance.

Proposed Grant for Professional Training

Proposals made at the Dominion-Provincial Conference of 1945 included an annual grant of $250,000 for purofessional training.

Sources:
National Research Council, Division of Medical Research.
Department of National Health and Welfare.
Canadian Medical Procurement and Assignment Board, *Supply and Distribution of Physicians in Canada*, Ottawa, 1945.
Canadian Public Health Association.
Canadian Nurses Association.

4. GENERAL PUBLIC HEALTH

The first health services to be regarded as the responsibility of public authorities were those measures directed toward safeguarding and improving community health. These services remain fundamental, other health programmes developing out of the general category as the community recognizes a special public interest in certain problems such as venereal disease, tuberculosis and mental health. As the trend toward the extension of personal health services continues hospital and medical care programmes have also grown in importance. At the same time, preventive and diagnostic services related to all these special programmes have been integrated with the general public health services.

Four closely related types of service constitute the general public health programme: (1) measures for the control of communicable disease; (2) those designed to combat infant and maternal mortality; (3) health examinations for detecting conditions requiring treatment; and (4) general educational measures undertaken to improve public knowledge in matters of health.

COMMUNICABLE DISEASES

The decrease in the prevalence of communicable diseases illustrates both the general improvement in community health standards, and the need for continuous and expanded public health activities.

Morbidity statistics are not sufficiently complete to use as an index of the effectiveness of public health measures but mortality statistics for certain diseases although available for the whole of Canada only since 1921, give some indication of the results achieved.

The decrease in the mortality rate from typhoid fever in Canada was from 10 per 100,000 in 1921 to 1·1 per 100,000 in 1944. The following table shows the disastrous effect upon the mortality trend of a milk borne epidemic in one city in 1927.

TABLE 12.—MORTALITY RATES—TYPHOID FEVER, CANADA, 1921-1944

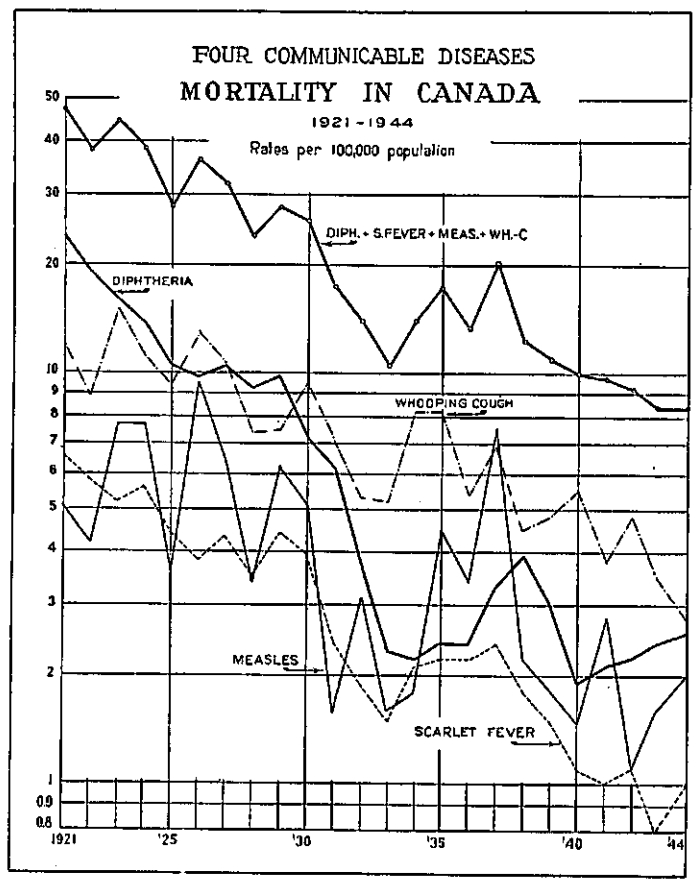
(Source: Vital Statistics Branch, Dominion Bureau of Statistics)

Year	Rate per 100,000	Year	Rate per 100,000
1921	10·1	1933	2·7
1922	8·4	1934	2·7
1923	9·0	1935	2·5
1924	6·6	1936	2·3
1925	5·9	1937	3·0
1926	4·9	1938	1·9
1927	11·6	1939	1·6
1928	4·8	1940	2·0
1929	4·7	1941	1·4
1930	4·4	1942	0·9
1931	4·1	1943	1·0
1932	3·2	1944	1·1

The benefits derived from the use of specific serums and vaccines are exemplified in the reduction in both morbidity and mortality from smallpox and diphtheria. From 1921 to 1933 the mortality rate from smallpox was less than one per 100,000 and from 1934 to 1939 was less than 0·1 per 100,000, and there were no deaths in the years 1940 to 1945. In 1924, the first year for which figures are available, there were 2,769 cases reported, and in 1945 only 5 cases. Diphtheria mortality has decreased 91 per cent from a rate of 24 per 100,000 in 1921 to 2·6 in 1944. In 1924 there were 9,039 cases reported; in 1945, 2,786.

The mortality from the four communicable diseases of childhood, diphtheria, scarlet fever, measles and whooping cough, taken together, shows a reduction of 83 per cent from 1926 to 1944. The rates shown in Chart 2 are for the whole of Canada and thus show the average reduction for all provinces. In some of the provinces the reduction, for example in diphtheria, has been even more striking. A defection in one province not only spoils the record of Canada as a whole, but prolongs and aggravates the hazards faced by the other provinces.

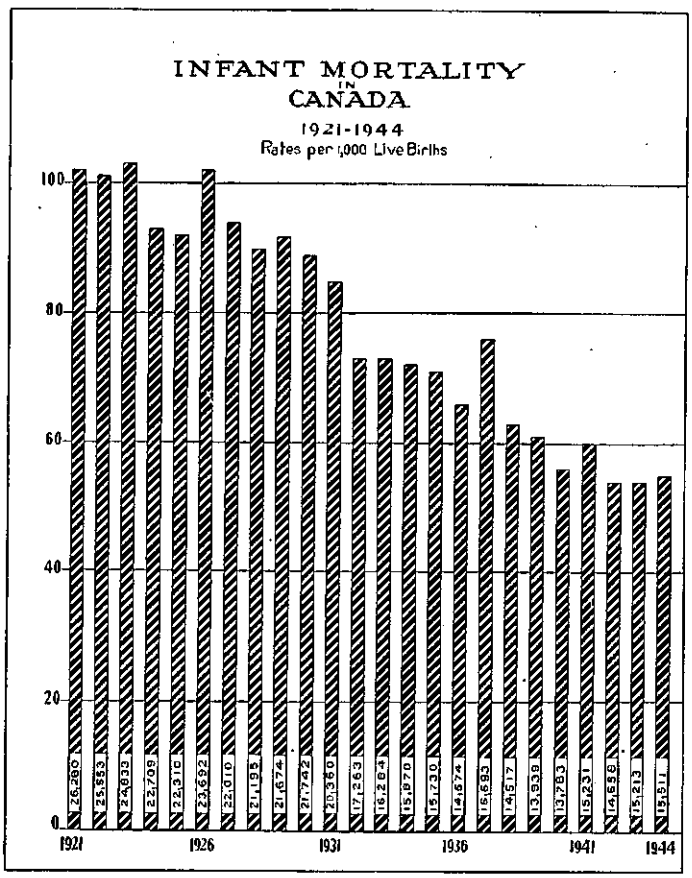
Chart 2.



INFANT AND MATERNAL MORTALITY

In recent years a great part of the energy designed to effect a decline in the general death rate has been directed at infant mortality and with a large measure of success. That Dominion, provincial and municipal health authorities, together with private welfare agencies, have all taken part in the struggle to reduce infant mortality is reflected in the figures for the period 1921-1944, which show a fairly constant improvement each year. In fact, any fluctuations in the general downward trend have been caused by the presence of epidemic diseases. In 1921 the infant death rate for Canada was 102 per 1,000 live births, while figures for 1942 and 1943 showed the lowest rates since the registration area was established, 54 per 1,000 live births. In 1944 the rate was slightly higher, 55 per 1,000 live births. In other words, over 13,000 young Canadians were added to the population of Canada in 1944 who, under conditions prevailing in 1921, would have died before their first birthday. Chart 3 shows infant mortality rates during the period 1921-1944.

CHART 3.

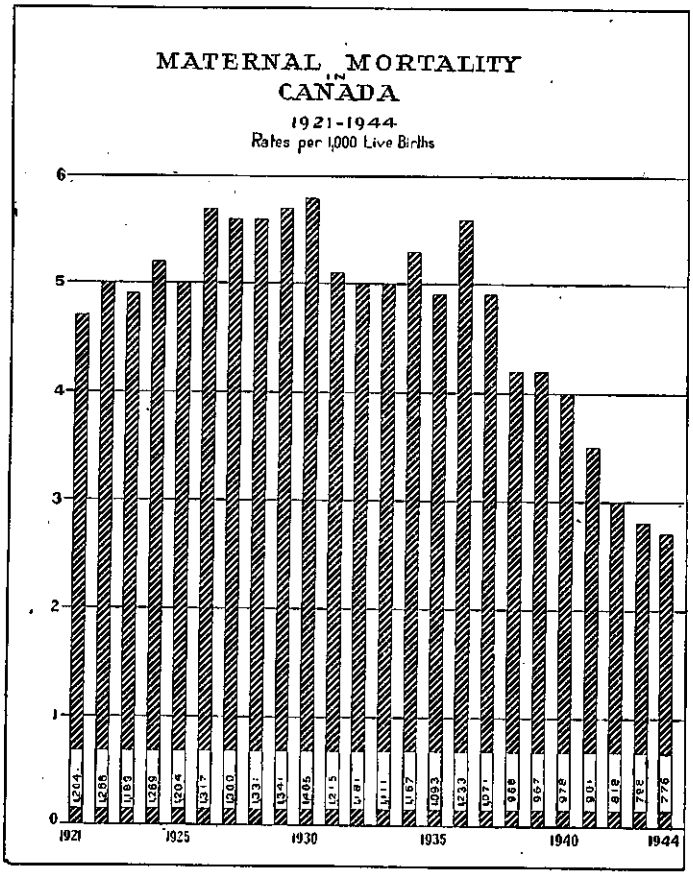


NOTE: Figures shown in the bars of the chart indicate the number of infant deaths for each year.

Maternal mortality (Chart 4) increased in the first part of the period, but from 1936 to 1944 decreased more than 50 per cent from the rate of 5·6 to 2·7 per thousand live births.

The infant and maternal mortality rates are influenced by provisions for protecting the milk and water supplies, and also by the amount of infant and maternal welfare services, and possibly by the increased hospitalization of the mothers. In 1926, 18 per cent of live births took place in institutions, and in 1944, 61 per cent. In four of the provinces

CHART 4.



NOTE: Figures shown in the bars of the chart indicate the number of mothers lost in childbirth each year.

more than 80 per cent were in institutions in 1944, and in one province, British Columbia, 93 per cent. The percentages are shown in Table 13.

TABLE 13.—PROPORTION OF LIVE BIRTHS OCCURRING IN INSTITUTIONS IN CANADA BY PROVINCES, 1926 AND 1944

(SOURCE: Vital Statistics Branch, Dominion Bureau of Statistics)

—	Per cent in Institutions		Per cent Increase
	1926	1944	
CANADA	17·8	61·0	242·7
Prince Edward Island	2·7	49·8	1,744·4
Nova Scotia	7·3	68·5	838·4
New Brunswick	8·5	43·3	409·4
Quebec	4·8	30·1	527·1
Ontario	24·9	79·4	218·9
Manitoba	31·3	83·0	165·2
Saskatchewan	22·5	81·7	263·1
Alberta	33·5	87·7	161·8
British Columbia	48·3	93·1	92·8

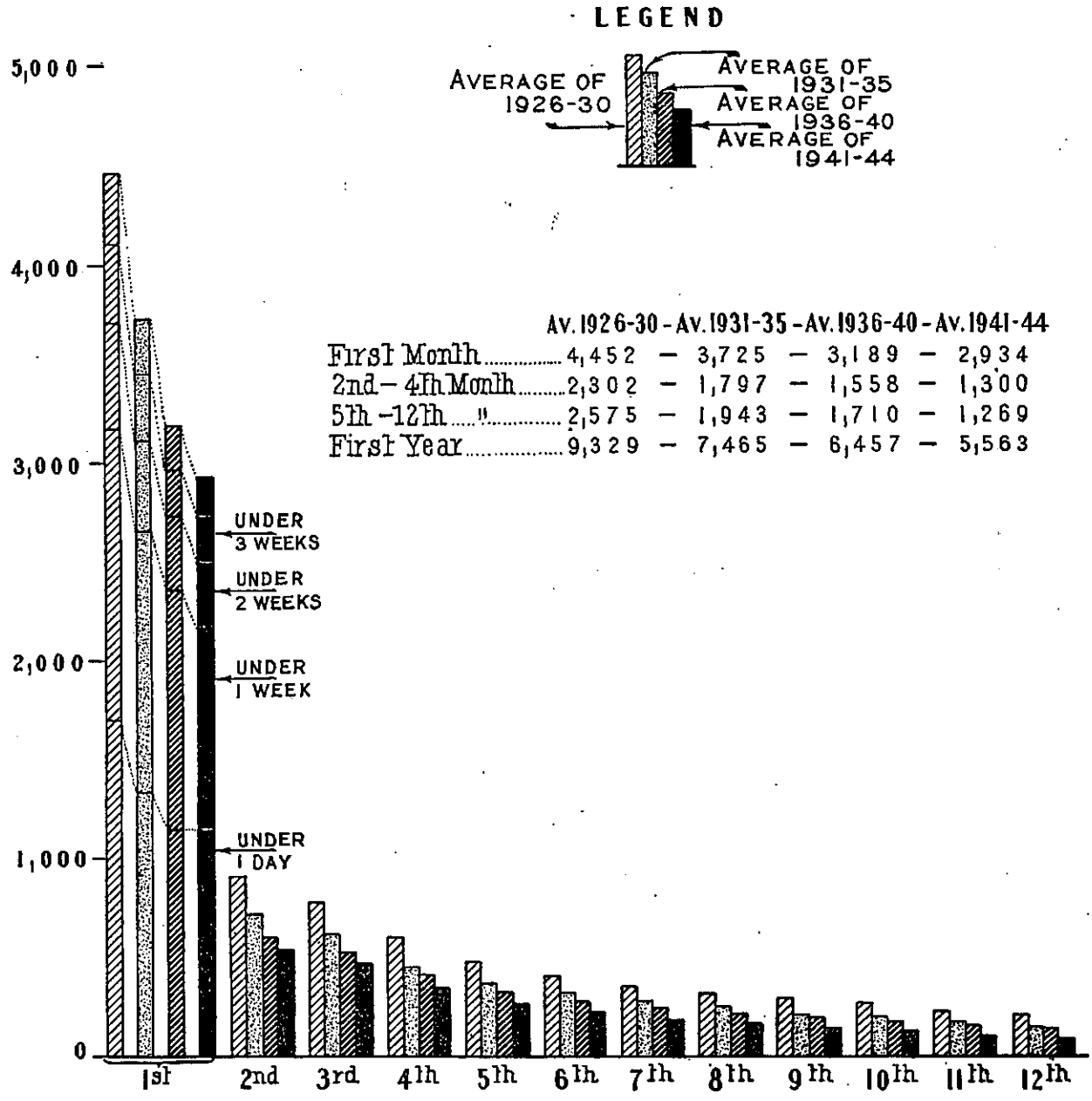
CHART 5.

INFANT MORTALITY RATES

AT

EACH AGE PERIOD

(Per 100,000 Live Births)



	Av. 1926-30	Av. 1931-35	Av. 1936-40	Av. 1941-44
First Month	4,452	3,725	3,189	2,934
2nd–4th Month	2,302	1,797	1,558	1,300
5th–12th "	2,575	1,943	1,710	1,269
First Year	9,329	7,465	6,457	5,563

Chart 5 shows infant mortality rates in monthly age periods and demonstrates very strikingly the proportion of deaths which occur during the first month, as compared to the other eleven months of the first year. It also indicates the increasing effectiveness of measures taken to prevent infant deaths, and emphasizes the necessity for continued improvement in efforts to protect child life.

A comparison with infant mortality and maternal mortality rates in certain other countries shows that Canadian rates have not reached as low figures as those attained by some other countries. Chart 6 compares the Canadian annual infant mortality rate per 1,000 live births since 1921 with those of England and Wales, the United States, Australia, and New Zealand. The Canadian rate was the highest of the five throughout the period although it recorded the largest actual decrease between 1921 and 1944.

The rates for England, the United States and Australia all declined by approximately 50 per cent from 1921 to 1944. In New Zealand, where the infant mortality rate was already low in 1921, the drop was smaller. The New Zealand rate remained the lowest in 1944, at 30 per 1,000 live births, as compared with 31 in Australia.

CHART 6.

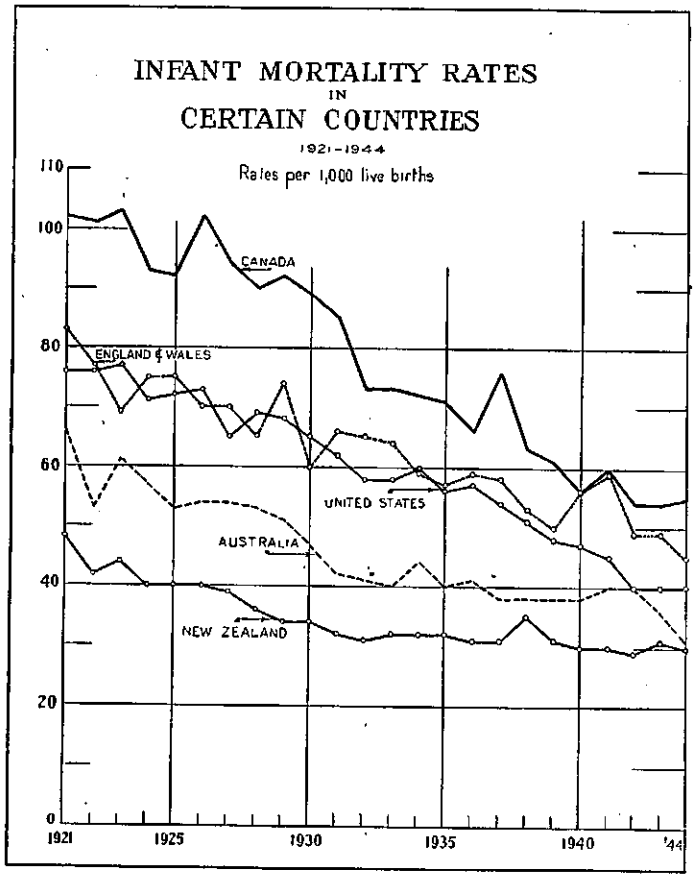
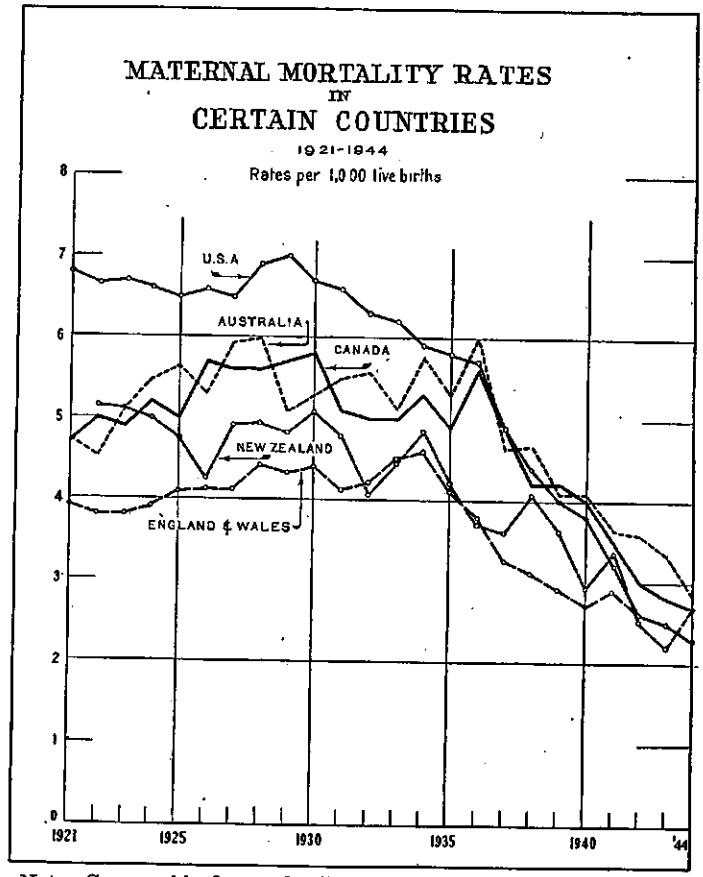


Chart 7 compares Canadian maternal mortality rates for 1921-1944 with those of the United States, Australia, New Zealand and England and Wales. The comparison is somewhat more favourable to Canada than that for infant mortality, but the Canadian rate remains higher than that of the United States.

Efforts are being made in the various provinces to combat infant and maternal morbidity and mortality through a variety of preventive and treatment measures. These include free maternity hospitalization in Alberta and the newly-instituted free examinations for expectant mothers in Ontario. The effect

CHART 7.



Note: Comparable figures for England and Wales not available for 1943 and 1944.

of improved public health services on infant mortality is illustrated by the fact that the 1944 infant mortality rate in rural areas and small urban centres not served by health units in Alberta was 25 per cent higher than that in the cities.

HEALTH EXAMINATIONS

The development of routine health examinations for detecting conditions requiring treatment is an important trend in general public health service. School medical inspections and the routine examination of employees in industry and government are examples of the type of general health examination gradually becoming a standard practice in Canada.

In many areas, the extension of diagnostic procedures for special conditions such as cancer, venereal disease, tuberculosis and mental illness has been coordinated with the administration of general public health services. This coordination has been accomplished most effectively in areas where local health units have been established.

HEALTH EDUCATION

A fundamental feature of modern public health service is the extension of health education. This is a basic part of the work of medical officers of health and public health nurses. It is also carried out by health authorities providing qualified speakers and utilizing printed materials, films and radio broadcasts in schools, to community groups and to the general public.

DOMINION ACTIVITIES

Department of National Health and Welfare

In addition to carrying out Canada's international health obligations, the Dominion government through the Department of National Health and Welfare provides a number of general public health services. One important function is that of protecting the public through the administration of the Food and Drugs Act, the work of the Proprietary and Patent Medicine Division, and of the Advertising and Labels Division.

The Narcotic Drugs Division supervises the importation, manufacture and sale of narcotic drugs. Related functions are performed by the Laboratory of Hygiene, which carries on special work in the standardization of biological preparations.

In the field of communicable disease control, the Quarantine and Immigration Medical Service provides quarantine control of all vessels entering Canada and carries out the prohibition of entry to diseased and defective immigrants.

The Public Health Engineering Division is responsible for the investigation of water supplies on common carriers engaged in international and interprovincial trade, for investigation of pollution of boundary waters and for sanitary surveys of shellfish areas.

Federal activities in the field of infant and maternal mortality are carried out through the Division of Child and Maternal Hygiene.

The Division of Nutrition carries on a programme of studies and research and provides services on matters relating to nutritional standards.

Health examinations of government employees are carried out through the Civil Service Health Division which is also responsible for the supervision of sick leave. The Immigration Medical Service gives physical examinations to all persons entering Canada.

The Division of Industrial Health is concerned with the improvement of health conditions in industrial establishments.

A broad programme of health education is carried on by the Department of National Health and Welfare through the various divisions concerned with the general public health services, and through those carrying out special programmes such as: Venereal Disease Control, Mental Health, Blindness Control, and Dental Health.

Through a system of health centres a generalized public health service is being developed in relation to the medical care programme administered by the Indian Health Services Division.

Other Departments

The Department of Agriculture carries out a variety of health activities, for the most part pertaining to food control. It is responsible for the inspection of meat, meat products and canned foods for export or interprovincial trade, for supervision of the production of milk exported to other countries, for the exclusion and control of domestic animals suffering from communicable diseases, and for the manufacture, sale and importation of concentrated milk products.

Responsibility for sanitary services in national parks rests with the Dominion Department of Mines and Resources.

Proposed General Public Health Grant

The health grants proposed at the Dominion-Provincial Conference of 1945 included a grant for general public health services. As modified at the April, 1946, meeting this grant would amount to 35 cents per capita annually. At the end of two years after its introduction, the grant would be increased by 5 cents per capita per year until it totalled 50 cents per capita. The intent of the grant was not to reduce the cost of Public Health Services to a province and its municipalities, but to aid in the extension and expansion of such services.

Distribution of the grant to the various provinces would be as indicated in the following table:

PROPOSED GENERAL PUBLIC HEALTH GRANT

(thousands of dollars)

Province	At Introduction	At Maximum
Prince Edward Island	33·3	47·6
Nova Scotia	203·3	290·0
New Brunswick	160·1	228·7
Quebec	1,166·2	1,666·0
Ontario	1,325·7	1,893·8
Manitoba	255·4	364·9
Saskatchewan	313·6	448·0
Alberta	278·7	398·1
British Columbia	286·3	409·0
Total cost to the federal government	4,022·6	5,746·1

PROVINCIAL AND LOCAL ACTIVITIES

Public health programmes carried out by the joint efforts of provincial and local governments include a wide range of preventive services. The programmes in effect are broadly similar in character, though they vary in administrative organization and in the extent to which particular services have been developed.

Environmental health services such as sanitation and water and milk control are basic to public health throughout the country. These are usually provided by local health authorities. Another phase of environmental health service, relating to conditions of industrial employment, has received attention in several provinces.

In the field of communicable disease control, provincial and local governments administer regulations respecting quarantine, carry out immunization programmes, and distribute biological products.

Extensive maternal and child health programmes have been developed by local agencies under provincial supervision. These are directed toward conserving maternal health and protecting child life through medical, nursing, prenatal, obstetrical and postnatal care, and infant, preschool and school health services. This work, and preventive activities related to special programmes such as venereal disease, tuberculosis, mental health, and cancer control are closely related to health education and public health nursing services. Diagnostic services for the specialized programmes are integrated with the basic public health services. Laboratory facilities have been established in all provinces to provide service to the various health activities. The work performed includes bacteriological examination of water, milk and food samples, the examination of specimens for diagnosis of communicable diseases, and special service in connection with programmes of venereal disease, tuberculosis and cancer control.

Provincial and local authorities promote the extension of physical examinations for special groups such as industrial employees. Some full-time health units provide routine physical examinations for the whole population in the area covered by the unit.

Dental health education and clinical service for special groups are features of public health work in many parts of the country.

Some Special Features of Provincial Organization

Prince Edward Island—Public health services for the whole island are administered by the provincial department, so that the province itself may be considered as a full-time health unit. The city of Charlottetown has a Food Inspector and a Sanitary Officer.

Nova Scotia—Public health services have been developed on a provincial basis, the province being divided into five full-time health units or districts, with a trained medical health officer in charge of each. Halifax City may be considered another health unit.

Sixty-five part-time town and municipal medical health officers work under the leadership of unit directors.

Decentralized provincial organization has made possible correlation and standardization of work throughout the province.

New Brunswick—Public health organization in New Brunswick is centralized through the provincial Department of Health and Social Services. There are seven full-time Medical Health Officers serving in the various Districts.

Quebec—The Department of Health deals with the administration of all matters concerning health and preventive medicine.

Since 1926 the system known as "County Sanitary Units", (Health Units) has been in operation. The purpose of the system is to provide a regular full-time public health service for each county or group of two or three adjoining counties that are included in the scheme. The Sanitary officers of the old districts supervise the few counties not organized into units. Many municipalities, such as Montreal and Quebec, have their own Health Bureaux.

In 1946 statutory provision was made for the training of technicians in preventive medicine and public health at the University of Montreal School of Public Health, which is to receive subsidies for twenty years of $40,000 annually.

Ontario—The new Division of Public Health Administration is dealing with the setting up of larger units of public health administration, particularly County Health Units.

By July 1946, there were 14 of these County Health Units in operation. The province pays a portion of the cost of operation ranging from 25 per cent in cities over 25,000 population up to 50 per cent in rural areas. At that time there were seven other counties in which a Public Health Nursing programme organized on a county basis was in operation. The province pays 33⅓ per cent of the cost of operation in these cases.

Cities such as Toronto, Hamilton, Windsor and Ottawa have their own health departments.

In 1946 an amendment to the Public Health Act provided for free medical examinations for all expectant mothers, the $5.00 fee to be paid to the physician by the provincial Department of Health.

Manitoba—Public health activities in Manitoba are organized through full-time health units which are fundamental to the provincial plan for personal and community health services.

By May 1946, 43 per cent of the population outside Winnipeg proper was included in health units, and the city itself was providing comparable services. Seven full-time medical health officers had been appointed. Four more units were coming into operation, and additional municipalities had approved schemes but they had not been incorporated in units because of staff shortages. Two-thirds of the cost of health units, estimated at $1 per person per year, is assumed by the province and the remaining third by the municipalities.

Provincial administration is through the section of Local Health and Welfare Services. This Division cuts across all the activities of the Department of Health and Public Welfare, and is responsible for the control of local part-time health officers, the establishment and supervision of local health units, and consultative services to local or municipal Health Departments throughout the province.

Saskatchewan—Health regions established under the Health Services Planning Commission provide full-time public health services. All members of the public health staff are appointed by the provincial Public Service Commission.

The province shares the cost of providing service, in most cases paying two-thirds while the municipalities in the region meet one-third of the cost.

The municipal share, paid directly to the province, may be raised through the general municipal levy or by special levy.

Three health regions had been established by September, 1946, two of which carried out services integrated with the personal health programme.

Alberta—Public health services are administered through a system of full-time Health Districts organized as groups of municipalities and established upon approval of the municipal councils concerned.

Provincial nurses in Health Districts in sparsely populated outlying areas provide a diversified medical and public health service. These nurses are required to have special qualifications.

Special provision has been made in Alberta for persons suffering from cancer. Where such patients are referred to diagnostic clinics by their own physicians, they are treated free of charge, if after examination, they are found to require X-ray or radium therapy or surgery.

The provincial programme of free hospital care for maternity cases is discussed in the sections dealing with General Hospitals and Health Insurance.

Surveys on Rocky Mountain spotted fever and sylvatic plague are conducted by the Division of Public Health Entomology.

British Columbia—Since October 1946 provincial health services have been organized as a branch of the Department of Health and Welfare. Grants are made to local agencies carrying out programmes of public health nursing and preventive dentistry.

Local health services have been developed through City Health Departments and Health Units. In other areas, services are carried out by public health nurses and part-time health officers and school medical inspectors.

The consolidation of the local health services in the Greater Vancouver area was particularly significant because it was the first of its kind in North America. A Metropolitan Health Board provides a unified health service for the municipalities of Vancouver, North Vancouver City, North Vancouver District, Richmond, Burnaby, for the University of British Columbia area, and District Lot 172.

In September 1946 there were six Health Units in operation within the Province. It was estimated that there should be an additional ten Health Units to meet the public health needs of the Province. Including the Metropolitan Health Services of Vancouver and Victoria and the organized Health Units, it was estimated that approximately 65 per cent of the people of the Province were covered by full-time health unit service and approximately 87 per cent had either full-time health unit or public health nursing service.

Local Health Services

Generally speaking, the various provincial public health Acts require the local municipality to appoint a local board of health, a medical officer of health, and such number of sanitary inspectors as is required to enforce the Public Health Act and regulations.

The local board of health is required to control nuisances, which are defined in very broad terms, and to carry out the communicable disease regulations. Most of the other commonly accepted activities of the modern public health department are not due to legal requirements but represent the normal growth of public activities within comparatively recent years.

The larger centres of population in Canada have full-time public health departments. Basically, the programmes of all these departments are much alike, including communicable disease control, food and milk control, sanitation and housing, maternal and child hygiene (including dental hygiene), adult hygiene (including industrial hygiene), laboratory services and school health services.

The extent to which these services are developed depends upon the budget available. Some of the cities provide their school health services through the Department of Health, others through the Board of Education. The public health nurses participate in many of the local health services.

Complete full-time health services are lacking in many of the smaller towns and rural areas. Public health authorities maintain that this deficiency could be met by the extension of the existing systems of local health units. This would mean that generalized public health services would be widely available through modern health departments staffed by full-time trained public health personnel.

Sanitation measures, such as the maintenance and operation of sewers and sewage disposal systems, the collection of garbage and the cleaning of streets, are required in the larger urban centres and in greater or less degree in the smaller ones, to protect and maintain the health of the residents. The cost of these services falls upon the local taxpayers and while accurate figures of expenditure on this account are not available, an estimate of $11 million based on the experience in larger cities would appear to be reasonable. This is a field in which much remains to be done in Canada. Many of the medium sized cities have inadequate sewage disposal methods. For instance it was stated at the conference on Planning and Development held in Toronto in May, 1944, that in 550 centres of population in Ontario with sewage systems 385 discharge raw sewage into adjacent rivers.

COSTS OF PUBLIC HEALTH SERVICES

The expenditures of all governments for general public health services for 1944, are shown in Table 14. This table does not include expenditures for hospital care of tuberculosis, mentally ill and general hospital patients in institutions. It includes related preventive services undertaken as part of the general public health system, and venereal disease control expenditures shown in detail in Table 16.

The item of $223,000 shown in the Dominion column covers the Venereal Disease grants, $202,000, and Vital Statistics transcripts $21,000, and is as shown in the Dominion Public Accounts for the fiscal year ended March 31, 1945. These do not coincide with corresponding items in the provincial public accounts due to differences in fiscal year ends and varying accounting practices.

The item of $1,179,000 shown in the Dominion column covers the expenditures made by the Health Branch of the Department of National Health and Welfare, excluding Venereal Disease Grants, hospital charges for sick mariners amounting to $175,000 in 1944-45, and special grants to welfare organizations, $68,000.

TABLE 14.—GENERAL PUBLIC HEALTH EXPENDITURE[1] IN CANADA, 1944

(SOURCE: Dominion-Provincial Conference—Public Finance Statistics)

(thousands of dollars)

	Source of Funds				Total Expenditure	Per Capita Expenditure (dollars)
	Province	Municipalities[2]	Dominion	Other		
Prince Edward Island	46	5	2	—	53	0·58
Nova Scotia	314	134	11	—	459	0·75
New Brunswick	140	69	10	22	241	0·52
Quebec	2,129[3]	1,569	80	5	3,783	1·08
Ontario	1,955	2,651	68	—	4,674	1·18
Manitoba	391[4]	416	13	12	832	1·14
Saskatchewan	517	168	13	—	698	0·83
Alberta	445	203	12	—	660	0·81
British Columbia	519	290	14	—	823	0·88
Total	*6,456*	*5,505*	*223*	*39*	*12,223*	*1·02*
DOMINION	—	—	1,179	—	1,179	—
GRAND TOTAL	**6,456**	**5,505**	**1,402**	**39**	**13,402**	**1·12**

[1] Excluding amounts for hospital and medical care so far as this was possible from information available.
[2] Amounts are only approximate and do not include expenditures for sanitation.
[3] Excluding capital expenditure of 50.
[4] Includes amounts paid through the Municipal Commissioner's levy.

Expenditures incurred by other Dominion Departments for activities of a health nature during 1944-45 included:

(*a*) The Administration of Animal Contagious Diseases Act and Meat and Canned Foods Act, including compensation for slaughtered animals, amounting to $1,935,000; and

(*b*) The Dominion Bureau of Statistics, in addition to the $21,000 paid to the provinces for transcripts, paid costs of

(i) forms supplied to the provinces for the registration of births, marriages and deaths, $15,090;

(ii) Salaries of clerks to prepare the main statistical tables for the Provincial Vital Statistics Reports, $57,125;

(iii) Rentals for machinery, cost of stationery, etc., $21,463;

a total of $93,879, which does not include the cost of the "Vital Statistics of Canada" at $5,235.

There were other public health services supplied during the year by Dominion Departments, the costs of which are unknown and cannot be estimated, such as:

(*a*) Under the provisions of the Statistics Act (Canada) the provinces are granted "franking privileges" on

(i) all registrations of births, marriages, and deaths;

(ii) all notifications of tuberculosis and venereal diseases;

(iii) reports of cancer incidence; and

(iv) weekly routine reporting of communicable diseases.

(*b*) Department of Mines and Resources—the public health costs of sanitation in the national parks.

(*c*) Department of Mines and Resources (Indian Affairs Branch)—the costs of strictly public health services to Indians and Eskimos, as distinct from other medical services. Indian Health Services were transferred to the Department of National Health and Welfare as at November 1, 1945.

SOURCES:
Department of National Health and Welfare.
Provincial Departments of Health.
The National Committee for Mental Hygiene (Canada), *Study of the Distribution of Medical Care and Public Health Services in Canada*, Toronto, 1939.

5. VENEREAL DISEASE

HISTORY OF DOMINION GRANTS

During the war of 1914-1918 the incidence of venereal diseases increased to such an extent that it was considered advisable to take appropriate steps to bring these diseases under control. Accordingly, in 1919, at the request of the Dominion Council of Health the Dominion Government voted the sum of $200,000 for the control of venereal disease.

This grant was allocated to the various provinces on the basis of population and subject to eight conditions, the most important of which was that each participating province was to expend an amount equal to that received from the Dominion Government. All the provinces, with the exception of Prince Edward Island which at that time did not have a Health Department, entered into the agreement.

In 1924-25 the amount voted was decreased to $150,000; in 1925-26 to $125,000; in 1927-28 to $100,000. In the fiscal year 1932-33, although the Dominion Council of Health had previously requested that it be increased, the grant was discontinued. Subsequently the Dominion Council of Health urged that federal aid to the provinces for venereal disease control be re-established at the earliest possible opportunity permitted by economic conditions.

A study of the situation in 1936 by a committee appointed by the Dominion Council of Health resulted in the observation that the withdrawal of the grant made to the provinces by the Dominion Government had resulted in diminishing materially the effort directed at public education and follow-up work and that there had been a lessening of facilities for treatment of venereal disease in the provinces. Consequently, the committee recommended that the grants be re-established.

During the following year, the desirability of reinstating the grants to the provinces was emphasized by resolutions passed by the Canadian Medical Association, the Canadian Public Health Association and the National Council of Women of Canada. At the same time, the Health League of Canada was continuing its work of promoting public interest in venereal disease control.

In May 1938 the Dominion government undertook to stimulate the development of increased treatment facilities in the provinces by voting the sum of $50,000 for the distribution of arsenical preparations utilized for the treatment of syphilis. The main object of this grant was to help the provinces release provincial money then expended for the provision of drugs and utilize it for the resumption of educational campaigns, follow-up of cases and investigation of contacts, thereby correcting some of the deficiencies which had prevailed since the discontinuance of the federal grant to the provinces in 1932.

On September 21, 1942, the problem of venereal disease control was discussed at a meeting of provincial Ministers of Health in Ottawa. The situation over the past several years, the progressive rise in the incidence of venereal disease, the discontinuance of federal grants and the desirability of their resumption were considered. It was suggested that the Dominion Council of Health might make recommendations as to the scope of the expenditure of federal grants by the provinces. The Council undertook to do so, and prepared a draft plan for federal allotments to the provinces for 1943-44. This formed the basis for the grant system introduced for that and subsequent years.

The 1943-44 grant, which amounted to $175,000, was distributed among the provinces on the basis of three factors: thirty per cent according to population; forty per cent in relation to the extent of the venereal disease problem; and thirty per cent on the basis of fiscal need of the province. In the case of each province, eighty-five per cent of its allotment was provided in cash and the remaining fifteen per cent in educational material.

In addition to these grants, the annual grant of $50,000 for the distribution of arsenicals was maintained. This grant was allocated on the basis of population.

A further amount of $15,000 was voted for administrative expenditures of the venereal disease programme of the federal government, so that the total appropriation amounted to $240,000.

Grants were made on the same basis during 1944-45 and 1945-46. There has been a gradual increase in Dominion expenditures for administration. (See note to Table 15.)

Table 15 shows federal expenditures for venereal disease control since 1919, when the first grants were introduced.

TABLE 15—DOMINION EXPENDITURES FOR VENEREAL DISEASE, 1919-1947

(Source: Public Accounts, Dominion of Canada)

(thousands of dollars)

1919-20	93.8	1931-32	49.9
1920-21	181.6	1932-33 to 1937-38	nil
1921-22	195.3	1938-39	49.9
1922-23	189.9	1939-40	50.0
1923-24	186.5	1940-41	49.9
1924-25	142.9	1941-42	49.4
1925-26	119.5	1942-43	48.6
1926-27	119.1	1943-44	202.7
1927-28	98.9	1944-45	308.8
1928-29	98.9	1945-46	261.4
1929-30	98.0	1946-47 (estimated)	271.4
1930-31	98.5		

NOTE: Dominion expenditures for administration since 1943-44 were: 1943-44, 7.2; 1944-45, 20.0; 1945-46, 31.6; 1946-47, 46.5 (estimated).

For the year 1946-47 the basis for the distribution of the grant of $175,000 was revised upon the recommendation of the Dominion Council of Health. Allocations for that year were based on a minimum organization grant of $4,000 to each province and the remainder apportioned according to population. The proportion of 85 per cent of the amount in funds and 15 per cent in educational materials has been maintained. The basis for allocating the grant for drugs remains unchanged.

Grants are made "for use in such preventive measures as will be most effective in reducing the incidence of venereal disease", specific reference being made in the 1946 Order in Council (P.C. 1690) to education, epidemiology, records, conferences and standards. Chief emphasis has been placed upon the first two of these preventive measures.

In order to qualify for the grant, each province is required to submit a comprehensive statement of its venereal disease control organization, programme, and budget, proposed plans for the extension and improvement of provincial and local services with the assistance of federal allotments, and a budget covering the expenditure of federal grants. Provinces are required to spend from their own funds amounts equal to or exceeding the federal grants, and to keep the latter in a separate fund, distinct from provincial funds.

Unexpended portions of the federal grant may be retained by the province for venereal disease control provided that it is expended within 12 months following the end of the fiscal year for which it was originally appropriated. This time limit upon retaining unexpended portions of the grants was introduced in 1946-47.

Proposed Grants for Venereal Disease

The health proposals made by the Dominion government to the Dominion-Provincial Conference in April, 1946, included a grant for venereal disease control. This grant, which was not to exceed $500,000 was to be distributed on the basis of a minimum grant of $4,000 for each province, and the remainder allocated fifty per cent according to population and fifty per cent according to the number of new cases of syphilis reported in the previous year.

The following table shows the distribution of the proposed grant.

PROPOSED VENEREAL DISEASE GRANT

(thousands of dollars)

Province	Estimated Grant
Prince Edward Island	6.4
Nova Scotia	25.8
New Brunswick	19.5
Quebec	163.0
Ontario	155.4
Manitoba	28.1
Saskatchewan	28.3
Alberta	29.2
British Columbia	44.3
Total cost to the federal government	500.0

The federal grant would match the expenditure of each province up to an amount equal to each province's share of the grant. The grant, which would be substituted for the existing federal grant, would be conditional upon free treatment being provided for all persons suffering from venereal disease infections.

FEDERAL AND PROVINCIAL ACTIVITIES

Within the existing division of responsibility between federal and provincial authorities for venereal disease control, provincial governments carry out the actual treatment, epidemiological investigation and educational programmes, and the federal government assists principally through the provision of grants and consultant services and the development of educational and research activities.

Federal Activities

At the First Federal-Provincial Conference of Venereal Disease Control Directors, August 8-11, 1944, it was agreed that the main function of the Federal Division of Venereal Disease Control should be to give leadership in developing a programme for the reduction of the menace of venereal infections in Canada. The activities of the Federal Division were expanded at the Second Federal-Provincial Conference of Venereal Disease Control Directors, April 29 and 30, 1946, to include the following:

(*a*) Planning, in consultation with the provinces, adequate control measures on a comprehensive, effective basis;

(*b*) Assisting in the carrying out of the plans for the annual provision and distribution of federal grants;

(*c*) Performing the functions of co-ordination, integration, standardization, survey and appraisal, and general exchange of administrative ideas by consultation with the provinces and national agencies and groups;

(*d*) Providing a consultative professional medical service;

(*e*) Assisting in the provision of lay and professional information services; and

(*f*) Encouraging research and improving training facilities for professional personnel.

Provincial Activities

There is a separate Division of Venereal Disease Control with personnel employed on a full-time basis in the Provincial Departments of Health of the Provinces of New Brunswick, Quebec, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. There is no separate Division of Venereal Disease Control in Prince Edward Island or in Nova Scotia, but in these provinces the venereal disease work is carried out directly by personnel of the Provincial Health Departments on a part-time basis.

All provinces offer the same general type of service, with slight modifications to suit local conditions. These services may be briefly described as follows:

Collection of statistics on the incidence of venereal disease.

Provision for laboratory diagnosis of venereal disease at provincially operated or assisted laboratories in all provinces.

Maintenance of clinics for free treatment and diagnosis of venereal disease, totalling 90 centres in all provinces.

Free distribution of drugs to physicians for cases of venereal disease.

Epidemiological investigation of the contacts to venereal disease cases, as a rule by public health nurses.

Case-finding of venereal disease through blood tests and medical examination of special groups. Legislation in Prince Edward Island, Manitoba, Saskatchewan, Alberta and British Columbia provides for a pre-marital examination for syphilis.

Enforcement of venereal disease control legislation in cases where patients with communicable infection refuse to take treatment.

Education of the medical and nursing professions and the general population regarding venereal disease. All provinces have educational programmes, carried out in some instances through co-operation with local agencies and community groups. The character of the programme varies in different provinces. In British Columbia and Ontario a high school lecture programme has been developed.

Following the 1946 report of the Manitoba Venereal Disease Commission, provision was made under the Public Health Act for the suspension or cancellation of licences of premises such as dance halls, beer parlours or tourist camps, which were directly or indirectly contributing to the spread of venereal disease. Similar legislation is already in effect in Nova Scotia.

In British Columbia the Minister of Health and Welfare has power to make regulations for routine blood tests by practising physicians of all pregnant women coming under their care. No such regulations are yet in effect. In Ontario a recent amendment to the Public Health Act provides for medical examinations at the expense of the province for all pregnant women, and blood tests are included among the procedures required by regulation.

A consultative service in venereal disease for physicians is available in Quebec, Ontario, Manitoba, Alberta, and British Columbia.

Municipal Programmes

In most Canadian cities venereal disease control activities are carried on as part of the general public health programme, with no separate divisions exclusively responsible for venereal disease work. In Montreal and Toronto, however, special medical officers have recently been appointed to supervise municipal venereal disease control programmes.

COSTS OF VENEREAL DISEASE CONTROL

Total expenditures by Dominion and provincial governments on venereal disease control in Canada during 1944-45 amounted to $856,400, or more than seven cents per capita. Table 16 shows the distribution of expenditures by provinces. No information is available respecting the extent of municipal expenditures for venereal disease control.

TABLE 16.—EXPENDITURES[1] FOR VENEREAL DISEASE CONTROL—FISCAL YEAR 1944-45

	Dominion Payments			Gross Expenditures by Provinces[2]	Per Capita Expenditures
	Administration and Education	Grants to Provinces			
		Cash grants	Value of drugs		
	$000	$000	$000	$000	$
CANADA	**107·6**[3]	**158·7**[4]	**43·5**	**748·8**	**·072**[5]
Prince Edward Island	—	1·3	·3	6·1	·067
Nova Scotia	—	8·0	2·6	51·8	·085
New Brunswick	—	8·1	1·6	19·8	·043
Quebec	—	56·7	14·8	214·6	·061
Ontario	—	45·9	15·9	264·9	·067
Manitoba	—	9·5	2·1	27·3	·037
Saskatchewan	—	11·6	·5	26·3	·031
Alberta	—	8·7	2·0	48·4	·059
British Columbia	—	8·9	3·7	89·6	·096

[1] Based on Dominion and provincial public accounts, Public Finance Statistics of the Dominion-Provincial Conference, and reports to the Division of Venereal Disease Control.

[2] Expenditures made in the provincial fiscal years out of provincial revenue sources and Dominion grants, including the value of drugs supplied.

[3] Administration costs amounted to 20·0. The remaining 87·6 includes federal expenditures for education and the 1944-45 grant for educational materials usually made to the provinces which was directed, by agreement with provincial authorities, toward the purchase of films distributed to the provinces for use in their educational work.

[4] Includes 10·0 paid from 1943-44 grant for educational material, distributed as follows: Prince Edward Island 0·1; Nova Scotia 0·6; New Brunswick 0·4; Quebec 3·9; Ontario 2·6; Manitoba 0·6; Saskatchewan 0·7; Alberta 0·6; British Columbia 0·5.

[5] Based on Dominion expenditures for administration and education, and gross provincial expenditures, which together amounted to 856·4.

Source:
Department of National Health and Welfare,
Dr. B.D.B. Layton, Director of Venereal Disease Control.

6. BLINDNESS

Blindness in Canada is primarily a civilian problem, there being only a comparatively small number of cases of blindness occasioned by war service. No special training programme for the blind is carried out by the Department of Veterans Affairs, but veterans are trained at the expense of the Department through special facilities maintained by the Canadian National Institute for the Blind. In October 1946 there were 65 veterans of the Second World War receiving such training, with 38 additional cases pending. One hundred and thirty-five other cases from the First World War were also classified by the Institute as having blindness caused by war service. Because of the arrangements for treatment and pensions provided through the Department of Veterans Affairs, the veterans' group may be excluded from a general discussion of the problem of providing health and related services for those suffering from blindness.

Excluding blind war veterans, the number of known blind in Canada of all ages registered with the Canadian National Institute for the Blind in November, 1944 was 13,133. Apart from these, there is a very large group with loss of vision in one eye, or with some progressive type of eye disease, who do not as yet come within the definition of blindness as stated in the Old Age Pensions Act, together with some who have not made their condition known and whose names have not been brought forward.

Table 17 shows the total number of blind in January, 1943 distributed into age groups comparable with those in the Beveridge Report. Some of the discrepancies may be due to a more stringent definition of blindness used in England as compared with Canada.

TABLE 17.—THE BLIND IN CANADA, JANUARY, 1943, BY AGE GROUPS

Age Group	Number	Per Cent of Total: Canada	Per Cent of Total: England (Beveridge Report)
1. Under 5 years	13	0·1	0·3
2. 5 to 15 years	314	2·6	1·9
3. 16 to 39 years	1,977	16·0	12·5
4. 40 to 49 years	1,441	11·7	10·2
5. 50 to 69 years	5,177	41·9	38·8
6. 70 years and over	3,422	27·7	36·3
Total	**12,344**[1]	**100·0**	**100·0**

[1]Males 7,118, Females 5,226.

The definition of blindness is contained in the Dominion Old Age Pensions Act, and the principles to be applied in determining eligibility are found in the regulations made pursuant to the Act. Section 42 of the Act states:

> "An application for a pension in respect of blindness may be made at any time after the proposed pensioner has reached the age of thirty-nine years and nine months."

In March 1946, 6,945 blind persons aged 40 or over were receiving pensions in accordance with the Act. The distribution by provinces is shown in Table 18.

TABLE 18.—DISTRIBUTION OF BLIND PENSIONERS AND INELIGIBLE APPLICANTS BY PROVINCES, MARCH 31, 1946

—	Pensioners		Ineligible Applicants[1]
	Number	Rate per 1,000 Population[2]	
CANADA	**6,945**	**0·57**	**2,374**[3]
Prince Edward Island	119	1·28	40
Nova Scotia	664	1·06	187
New Brunswick	737	1·55	636
Quebec	2,568	0·71	1,097
Ontario	1,543	0·38	262
Manitoba	365	0·49	35
Saskatchewan	340	0·40	48
Alberta	269	0·32	14
British Columbia	340	0·35	55

[1] Includes all applicants since the inception of the scheme who met other requirements, but were not sufficiently blind to qualify.
[2] Based on Dominion Bureau of Statistics population estimate for 1946.
[3] Includes a small number of present pensioners who were accepted on re-application.

As Table 18 indicates, over two thousand persons have applied for pensions and met provincial requirements regarding age, residence and lack of means, but were not sufficiently blind to qualify. In the absence of treatment, most of them may be expected to reach this stage within the next few years. Should such a condition arise, the additional expenditure will be heavy. Although the blind pensioners come within the provisions of the Old Age Pensions Act, the financial commitment is in no way similar, since some of them may receive financial aid for thirty or forty years. This underlines the need for adequate prevention and treatment measures.

The frequency with which treatment would prove beneficial is indicated by the following analysis of 534 applications submitted in the year 1942.

76808—5½

APPROVED FOR PENSION—356

Number of cases where treatment might restore useful vision	129 or 36%
No treatment recommended	227 or 64%

NOT YET ELIGIBLE—178

Number of cases where treatment would prevent or delay blindness	124 or 70%
No treatment recommended	54 or 30%

Thus 36 per cent of those awarded pensions were, at the time of the award, considered curable to the point of restoring useful vision by treatment. Seventy per cent of the group not yet eligible could have their blindness delayed or its possibility removed by proper care.

There is no provision under the Old Age Pensions Act for giving treatment which may restore sight to blind persons receiving pensions or those with failing vision who may also become public charges. In some provinces arrangements are made through other agencies to provide treatment, but the Dominion does not share these costs.

Since there is no uniform policy with respect to treating blindness, there has been a tendency for pensioners not to seek treatment, preferring to retain the security afforded by a pension.

Payment of pensions to the blind is limited by the Act to those who have reached the age of forty years, entirely neglecting young persons who with the aid of treatment might become self-supporting. Experience has shown that if treatment is not provided until the blind are past middle life very little can be done from the standpoint of rehabilitation, largely because of lessened initiative and vigour.

The Dominion Council of Health recommended to the House of Commons Social Security Committee in 1943 that pensions should be linked with treatment and training and given only when these fail. It also proposed that the age limit be lowered to twenty-one years or even less, since the blind or partially sighted have a negligible or a greatly reduced earning capacity until trained. It was also suggested that the entire task of prevention, treatment and training should be placed in the hands of public health departments, for the development of a co-ordinated plan, so that no one would become a public charge because of lack of treatment. Responsibility for service would not necessarily entail the maintenance of treatment centres, and actual training and placement would be carried out by appropriate agencies.

The high employability of the 1,631 registered blind between the ages of 20 and 40 years is indicated by the following figures, compiled in 1943 by the Canadian National Institute for the Blind.

Blind males, employed	400	
Blind males, partially employed	468	
Blind males, unemployable	153	
Blind females, single, employed	150	
Blind females, single, partially employed	230	
Blind females, single, unemployable	67	
Blind females, married, employed	15	
Blind females, married, partially employed	124	
Blind females, married, unemployable	24	
		1,631

Unemployable group includes:

Unemployable, mental	142	
Unemployable, other	102	
		244

Two years later, in June, 1945, the total number registered between these ages had risen to 1,730. The Institute stated that it employed 546 of these, and that 132 more were in independent occupations. It planned to increase the existing number of placement officers and trained home teachers.

Good work has been done in many cases through existing agencies carrying out treatment and rehabilitation, but a better integrated programme with special attention to the "under 40" group, seems essential.

Health departments are already deeply involved in the prevention of blindness, even though their programmes are not directed primarily toward that object, except in the instance of preventive drops for ophthalmia neonatorum.

Proposed Grant for Blindness

Health grants proposed at the Dominion-Provincial Conference, 1945, included an amount to be determined annually to be made available so that the pension age for blind persons might be lowered from 40 to 21 years, and treatment provided to all who would benefit therefrom. Persons suffering from conditions which might lead to blindness will also be assisted. Fifty per cent of the cost is to be borne by the federal government and 50 per cent by the provinces. Current plans also envisage a general increase in the pension rate for totally dependent blind persons to $30 a month.

The proposed federal grant would result in the following estimated distribution among the provinces:

PROPOSED BLINDNESS GRANT

(thousands of dollars)

Province	Estimated Grant
Prince Edward Island	13·5
Nova Scotia	98·0
New Brunswick	109·6
Quebec	443·7
Ontario	214·9
Manitoba	66·2
Saskatchewan	54·9
Alberta	41·6
British Columbia	49·6
Total cost to the federal government	1,092·0

Sources:
Department of National Health and Welfare: Dr. F. S. Burke. Director of Blindness Control.
Department of Veterans Affairs.

7. CRIPPLED CHILDREN

The Director of Public Health Services of the Department of National Health and Welfare, in December, 1944, estimated that there was a total of 50,000 children in Canada suffering from crippling conditions.

A registration of crippled children carried out by the Manitoba Department of Health indicates that one child per thousand population requires treatment for a crippling condition. In 1944 there were 734 crippled children in Manitoba for whom remedial action would bring beneficial results.

A crippled children's programme for Canada has been suggested, to comprise a number of services which may be briefly described as follows:

1. The determination of the extent of the problem through surveys conducted by provincial departments and organizations interested in locating crippled children, particularly those living in rural areas. In this respect the establishment of a recording and reporting system would be of value.

2. The provision of clinics in co-operation with provincial and municipal officers, doctors, nurses, and hospitals. For this purpose the provision of free transportation and free appliances would prove of value.

3. The promotion of a campaign to provide for education of the physically handicapped, including instruction in the home and in open air camps.

4. Co-operation with schools, training agencies, local groups and rehabilitation services to provide vocational training, including funds for transportation, board and room, equipment and appliances during training.

5. Job placement with the assistance of employment services, rehabilitation services, training agencies and employers and local groups. Provision should be made to arrange for sheltered workshops and for shut-ins.

6. The establishment of a Directory of Services for Crippled Children listing all organizations rendering service to the crippled, together with a description of such service.

The Canadian Council for Crippled Children was organized in 1937 to act as a unifying national link between organizations actively engaged in the care of crippled children.

There are private agencies responsible for co-ordinating the work for crippled children in six of the provinces. At July 1, 1943, there were hospitals in seven provinces possessing facilities for the treatment of orthopædic cases, distributed as follows:

—	Private Organizations	Hospital Treatment Facilities
Prince Edward Island	1	—
Nova Scotia	1	1
New Brunswick	1	—
Quebec	1	8
Ontario	1	14
Manitoba	—	5
Saskatchewan	—	6
Alberta	1	2
British Columbia	—	2

All provincial governments co-operate with the voluntary organizations in providing for the care and training of crippled children. Financial arrangements vary from province to province, New Brunswick and Alberta having accepted full responsibility for the cost of treating poliomyelitis cases.

Financial Assistance for Care of Crippled Children

Prince Edward Island—The Red Cross Society assumes financial responsibility for indigent cases.

Nova Scotia—A Kenney Treatment Clinic has been operated by the Health Department since 1942. A considerable number of crippled children are treated each year at the Orthopædic Clinic in connection with the Children's Hospital, Halifax.

New Brunswick—The province has assumed the cost of hospital treatment for all poliomyelitis patients as of January 1, 1945.

Quebec—Indigent cases are admitted to hospitals under the Quebec Public Charities Act.

Ontario—The municipality of residence pays $1.75 per day and the Provincial Government 60 cents per day for indigent cases. Local service clubs frequently pay hospitalization charges. The province also makes an annual grant to the Ontario Society for Crippled Children.

Manitoba—The Shriners' Hospital accepts patients free of charge. Others are paid for by provincial and municipal grants.

Saskatchewan—The municipality of residence and the Red Cross accept responsibility for indigent cases. The Winnipeg Shriners Hospital also accepts Saskatchewan patients free of charge.

Alberta—Free treatment in special hospitals is provided for all persons with poliomyelitis. For children suffering from other crippling conditions, the province pays for public charges. Cases admitted to the Junior Red Cross Crippled Children's Hospital are paid for by the Red Cross.

British Columbia—A per diem grant of 70 cents is paid by the Provincial Government up to 300 days. A municipal per diem grant is given in certain instances. In the Crippled Children's Hospital, payment is maintained by Vancouver Welfare Federation. The Queen Alexandra Solarium at Cobble Hill on Vancouver Island receives an annual grant of $3,000 from the Provincial Government.

Proposed Grant for Crippled Children

The health grants proposed by the Dominion at the 1945 Conference included a Crippled Children Grant, not to exceed $500,000 annually. It is to assist the Provincial Governments in preparing an extensive programme for the prevention of crippling conditions in children. Allocation is to be on the basis of the population as enumerated at the latest census of Canada, or on such other method of distribution as may be arrived at by the Federal Government after consultation with the Dominion Council of Health.

On the basis of population, the grant would be distributed among the provinces as follows:

PROPOSED CRIPPLED CHILDREN GRANT

(thousands of dollars)

Province	Estimated Grant
Prince Edward Island	4·2
Nova Scotia	25·0
New Brunswick	19·8
Quebec	144·4
Ontario	164·2
Manitoba	31·6
Saskatchewan	38·8
Alberta	34·5
British Columbia	35·4
Total cost to the federal government	497·9

Sources:

Report of the Advisory Committee on Health Insurance.
House of Commons Special Committee on Social Security, Minutes of Proceedings and Evidence.

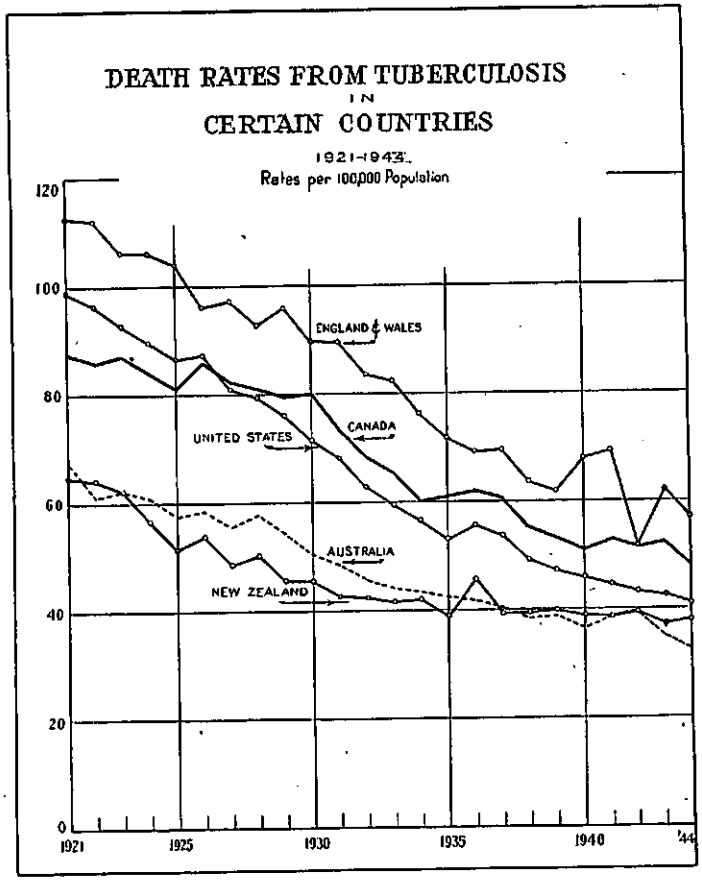
8. TUBERCULOSIS

Almost thirty thousand Canadians died of tuberculosis in the years 1940-1944. It is the seventh cause of death for all ages, first cause for the age group between 15 and 45.

Tuberculosis mortality in Canada decreased steadily up to 1940, when it was approximately 75 per cent lower than it had been in 1900. Accurate figures for the earlier year are not available for Canada as a whole, but on the basis of a study of deaths recorded for Ontario and Quebec, the death rate in 1900 appears to have been at least 200 per 100,000. By 1940 it had fallen to 50·9.

A comparison of tuberculosis death rates in Canada and certain other countries is shown in Chart 8. The Canadian rate is lower than that in England and Wales, but higher than those of the United States, Australia and New Zealand. Unlike the United States, but like the other countries shown, Canada has had an increased mortality rate since the outbreak of war. Since 1921 the rate in Canada has declined less sharply than that in the United States.

CHART 8.



Mortality rates as published by the Dominion Bureau of Statistics for the years 1929-1944 are shown in Table 19.

TABLE 19.—DEATH RATES PER 100,000 POPULATION FROM TUBERCULOSIS, BY PROVINCES, 1929-1944

(SOURCE: Vital Statistics Branch, Dominion Bureau of Statistics)

	Average 1929-33	Average 1934-38	Average 1939-43	1944
CANADA—				
Total deaths	72·7	59·6	52·1	47·9
Indians[1]	666·9	708·7	685·4	665·6
Exclusive of Indians	66·6	53·0	45·6	41·6
Prince Edward Island—				
Total deaths	91·6	77·8	58·9	63·7
Indians[1]	462·7	341·6	351·4	751·9
Exclusive of Indians	90·4	77·1	58·0	61·7
Nova Scotia—				
Total deaths	100·2	85·3	71·2	58·3
Indians[1]	400·8	381·8	375·3	507·6
Exclusive of Indians	99·1	84·2	70·0	56·6
New Brunswick—				
Total deaths	87·3	78·9	63·5	51·5
Indians[1]	554·9	488·5	485·9	537·4
Exclusive of Indians	85·4	77·2	61·8	49·4
Quebec—				
Total deaths	109·4	88·8	80·5	75·0
Indians[1]	139·1	278·9	326·3	441·0
Exclusive of Indians	109·3	88·0	79·4	73·4
Ontario—				
Total deaths	48·4	36·1	28·3	26·9
Indians[1]	431·7	341·5	374·2	407·1
Exclusive of Indians	45·2	33·5	25·5	23·8
Manitoba—				
Total deaths	60·8	56·5	49·1	47.5
Indians[1]	926·8	1,228·5	1,087·3	1,129·7
Exclusive of Indians	44·9	33·9	26·8	23·5
Saskatchewan—				
Total deaths	37·0	30·7	28·7	26·4
Indians[1]	764·6	770·5	764·9	522·7
Exclusive of Indians	28·0	20·5	16·9	17·9
Alberta—				
Total deaths	54·6	42·8	38·0	35·6
Indians[1]	1,535·2	1,348·6	1,202·1	1,221·8
Exclusive of Indians	32·9	22·7	18·5	17.3
British Columbia—				
Total deaths	86·5	75·7	67·7	55·5
Indians[1]	698·8	843·3	765·3	670·2
Exclusive of Indians	63·3	50·3	46·3	38·2

[1]Including half-breeds and non-ward Indians.

TABLE 20.—TUBERCULOSIS MORTALITY RATES BY PROVINCES, 1928 AND 1944

(SOURCE: Vital Statistics Branch, Dominion Bureau of Statistics)

	Total Deaths (Rate per 100,000 population)			Deaths exclusive of Indians[1] (Rate per 100,000 population)			Deaths of Indians[1] (Rate per 100,000 population)			
	1928	1944	Per cent reduction	1928	1944	Per cent reduction	1928	1944	Per cent Reduction	Per cent Increase
CANADA	**81·0**	**47·9**	**40·86**	**75·6**	**41·6**	**44·07**	**614·8**	**665·6**	—	**8·26**
Prince Edward Island	113·6	63·7	43·93	114·0	61·7	45·88	[2]	751·9	[2]	—
Nova Scotia	112·2	58·3	48·04	111·1	56·6	49·05	437·9	507·6	—	15·92
New Brunswick	101·7	51·5	49·36	100·2	49·4	50·70	498·1	537·4	—	7·89
Quebec	119·7	75·0	37·34	119·5	73·4	38·58	166·8	441·0	—	164·39
Ontario	56·4	26·9	52·30	52·9	23·8	55·01	486·8	407·1	16·37	—
Manitoba	61·0	47·5	22·13	50·7	23·5	53·65	633·9	1,129·7	—	78·21
Saskatchewan	44·8	26·4	41·07	35·2	17·9	49·15	837·3	522·7	37·57	—
Alberta	51·8	35·6	31·27	37·0	17·3	53·24	1,123·5	1,221·8	—	8·75
British Columbia	100·2	55·5	44·61	75·1	38·2	49·13	736·1	670·2	8·95	—

[1]Including half-breeds and non-ward Indians.
[2]No Indian deaths from tuberculosis were reported in Prince Edward Island in 1928.

The inclusion of deaths of half-breeds and non-ward Indians with Indian deaths in Table 19 is somewhat misleading, because it does not take into account the fact that responsibility for the care of Indians who are wards of the Dominion rests with the federal government, while half-breeds and non-ward Indians are cared for as part of the white population within the provincial systems of tuberculosis control. The half-breed deaths are concentrated largely in the western provinces.* Their exclusion has little effect on the white death rate in Saskatchewan and British Columbia, but in Manitoba and Alberta it results in a substantially lower rate for white deaths. The white death rate for 1944 for Alberta, as shown in Tables 19 and 20, is the lowest in Canada, but if half-breed deaths were included the rate would become 21·7 as compared with only 18·4 in Saskatchewan.

Death rates were highest in Quebec, the Maritime Provinces and British Columbia, and lowest in Ontario and the Prairie Provinces.

Mortality from tuberculosis has decreased in all provinces, especially in the case of the non-Indian population. However, this reduction has not been uniformly great in all provinces. Statistics for 1928 and 1944 clearly indicate the change. Table 20 shows Canadian and provincial death rates for these years, with the percentage of reduction or increase, for the total population, population excluding Indians, and Indians.

The Indian rates are of interest because little change has taken place in the general situation. The Indian death rate has continued to increase in the country as a whole. Three provinces show some reduction, the most significant being in Saskatchewan and Ontario, where the preventive programmes have been in operation longest, and where Indian deaths have been reduced 38 and 16 per cent respectively.

Both the actual death rates and the extent to which they have been reduced in the various provinces appear to be related to the availability of treatment facilities, both in terms of sanatorium accommodation and provisions for meeting the costs of care.

SANATORIUM REQUIREMENTS

The distribution of facilities for the hospitalization of tuberculous patients, and the extent of care provided is shown in Table 21.

*In 1944 there were 73 deaths among half-breeds, distributed as follows: Ontario 1, Manitoba 28, Saskatchewan 5, Alberta 36, and British Columbia 3.

TABLE 21.—TUBERCULOSIS HOSPITALS BY PROVINCES, 1940 AND 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

	1940				1944				Per Cent Increase		
	Number of Hospitals	Bed Capacity	Patient Days	Daily average population	Number of Hospitals	Bed Capacity	Patient Days	Daily average population	Bed Capacity	Patient Days	Daily average population
CANADA	**78**	**10,459**	**3,589,691**	**9,808**	**80**	**11,576**	**3,813,814**	**10,421**	**10·69**	**6·25**	**6·25**
Prince Edward Island	1	82	27,641	76	1	80	28,570	78	−2·44	3·36	2·63
Nova Scotia	10	597	199,150	544	10	695	226,269	618	16·42	13·62	13·60
New Brunswick	3	540	191,644	524	3	548	198,600	543	1·48	3·63	3·63
Quebec	24	2,903	985,364	2,692	28	3,594	1,152,477	3,149	23·80	16·96	16·98
Ontario	14	3,638	1,238,957	3,385	14	3,660	1,197,541	3,272	0·60	−3·34	−3·34
Manitoba	8	848	274,226	749	8	888	263,005	719	4·72	−4·09	−4·01
Saskatchewan	4	762	287,800	786	4	822	309,981	847	7·87	7·71	7·76
Alberta	8	409	143,407	392	5	424	149,054	407	3·67	3·94	3·83
British Columbia	6	680	241,502	660	7	865	288,317	788	27·21	19·38	19·39

TABLE 22.—NUMBER OF DEATHS FROM TUBERCULOSIS IN RELATION TO SANATORIUM CAPACITY AND MINIMUM REQUIREMENTS

—	White Population					Indian Population				
	Deaths 5-year average 1940-44	Beds available 1946	Beds per death	Minimum beds required (3 per death)	New Beds required	Deaths 5-year average 1940-44	Beds available 1946	Beds per death	Minimum Beds required (3 per death)	New Beds required
CANADA	**5,147**	**11,759**	**2·3**	**15,441**	**3,682**[1]	**800**	**1,150**	**1·4**	**2,400**	**1,250**
Prince Edward Island	53	155	2·9	159	4	1				
Nova Scotia	389	839	2·2	1,167	328	10	—	—	63	63
New Brunswick	270	898	3·3	810	—	10				
Quebec	2,623	3,594	1·4	7,869	4,275	52	—	—	156	156
Ontario	956	3,660	3·8	2,868	—[2]	119	35	0·3	357	322
Manitoba	184	775	4·2	552	—[3]	169	191[4]	1·1	507	316
Saskatchewan	150	762	5·1	450	—	100	60	0·6	300	240
Alberta	147	412	2·8	441	29[5]	154	363[6]	2·4	462	99
British Columbia	375	664	1·8	1,125	461	185	501[7]	2·7	555	54

[1] Based on the total bed capacity and total number of deaths. It takes into account the fact that a number of provinces have surplus bed capacity in terms of the standard adopted. The total new beds for provinces requiring additional accommodation, as shown in this column, is 5,089.
[2] In the northern part of the province, where the bed ratio is low, 450 new beds are estimated as required.
[3] It is estimated that 100 new beds are required to improve standards of care.
[4] Includes 75 beds in the new hospital at The Pas. It is proposed to enlarge this hospital to include 125 beds for tuberculosis.
[5] A total of 100 new beds and 200 replacements is estimated as required.
[6] Includes new 350-bed hospital at Edmonton, taken over by the Dominion from the U.S. Army. While it is not yet fully in use for the treatment of tuberculous Indians, it is proposed to use it solely for this purpose and its total bed capacity may be deducted from the number of beds required.
[7] Includes new hospitals at Prince Rupert (100 tuberculosis beds) and Nanaimo (200 beds). Nanaimo is not yet providing treatment.

While it has become increasingly difficult to determine the number of beds required for an adequate tuberculosis treatment programme, three beds per death is recognized as a minimum standard. Even on this basis, Canada is short of sanatorium accommodation to treat all tuberculous patients who require care. Table 22 compares available beds and standard requirements for white and Indian groups, and shows the ratio between beds and deaths.

Table 22 indicates that greatly increased expenditure is necessary to meet Canadian needs. Relatively greater increases are required to bring the number of sanatorium beds up to minimum standards in provinces where mortality rates are highest. Increasing the number beyond the minimum can help to improve standards of treatment. The fact that Table 22 shows current bed capacity rather than that existing during the whole period for which death rates are shown (in Table 19) makes it impossible to show the effect of adequate accommodation upon the death rate. However, it is significant that Saskatchewan, which had the lowest death rate over the fifteen-year period, has by far the largest ratio of beds to deaths, in contrast to other provinces where lack of accommodation is reflected in high death rates.

In provinces where bed capacity has exceeded the minimum over a period of years, it has been possible virtually to eliminate the waiting period between diagnosis and admission to the sanatorium, and this in turn has tended to decrease the extent of tuberculosis.

During 1944 the daily average sanatorium population in Ontario was 3,272, and there was an average of 956 white and 119 Indian deaths during the period 1940-1944. In Quebec the average population in tuberculosis hospitals was 3,149, but deaths in that province averaged 2,623 (white) and 52 (Indian).

The need for increased sanatorium accommodation may be illustrated by the province of Quebec, where the average death rate for 1939-1943 was 80·5, the reduction in non-Indian deaths between 1928 and 1944 was only 39 per cent, and 4,275 sanatorium beds are required. This contrasts with the situation in Ontario, where the minimum rate of three beds per death has been obtained, and where tuberculosis mortality, exclusive of Indians, was reduced 55 per cent between 1928 and 1944. Average rate based on all tuberculosis deaths in Ontario in 1939-1943 was only 28·3.

Further indication of the need for increased treatment facilities is found in the relation between deaths attributed to tuberculosis and average sanatorium population. This is shown in Table 23.

TABLE 23.—DEATHS FROM TUBERCULOSIS COMPARED WITH AVERAGE SANATORIUM POPULATION, 1944

—	Average Deaths, 1940-44		Daily Average Population, Tuberculosis Hospitals, 1944
	White	Indian[1]	
Prince Edward Island	53	1	78
Nova Scotia	389	10	618
New Brunswick	270	10	543
Quebec	2,623	52	3,149
Ontario	956	119	3,272
Manitoba	184	169	719
Saskatchewan	150	100	847
Alberta	147	154	407
British Columbia	375	185	788

[1] Including half breeds and non-ward Indians.

The three provinces with the lowest death rates, Saskatchewan, Alberta and Ontario, all show high average sanatorium population compared with average number of deaths, while provinces with high death rates had a relatively smaller number of sanatorium cases compared with tuberculosis deaths.

MEETING COSTS OF TREATMENT

Opportunity to benefit from sanatorium treatment for tuberculosis may be limited by provisions for meeting the costs of care. If there is no financial obstacle to hinder admission to the sanatorium the patient is most likely to receive prompt and adequate treatment, and his opportunities for rehabilitation are enhanced because his family is not impoverished by meeting the costs of protracted illness.

There has been a trend towards free treatment of tuberculosis in Canada, which has increased in importance as experience has shown such provision to be a decisive factor in the more efficient control of the disease. Free treatment has been in effect in Saskatchewan since 1929 and in Alberta since 1935. These provinces, along with Ontario, have the lowest tuberculosis death rates in Canada. More recently free care for tuberculous patients has been provided in Manitoba (1944), New Brunswick (1945), and Nova Scotia (1946).

COSTS OF TUBERCULOSIS CONTROL

Expenditures on tuberculosis control include those directed towards prevention and those for actual care and treatment of patients in sanatoria.

It is not possible to segregate provincial expenditures on education, diagnostic facilities, observation clinics, rehabilitation and after care. These services are relatively inexpensive and are developing rapidly.

Great assistance has been given by voluntary funds, such as the Christmas Seal Fund, in pushing forward mass X-ray surveys. During the 1945 campaign, $900,941 was contributed to the Christmas Seal Fund for the prevention of tuberculosis.*

In 1945, 908,294 people were X-rayed in clinics and mass surveys.† The discovery of new active cases of tuberculosis has accentuated the need for increased treatment facilities.

Expenditures on the care of patients in tuberculosis hospitals in Canada during 1944 amounted to more than nine million dollars. These expenditures are shown by provinces in Table 24, together with an analysis of sources of funds.

FEDERAL ACTIVITIES

Dominion government activities relating to tuberculosis include the maintenance of hospital facilities for tuberculous veterans and the operation of an extensive programme for the prevention and treatment of tuberculosis among Indians.

* Contributions to the Fund in the various provinces amounted to: Prince Edward Island, $10,590; Nova Scotia, $28,160; New Brunswick, $24,122; Quebec, $192,237; Ontario, $313,337; Manitoba, $60,111; Saskatchewan, $95,797; Alberta, $82,572; and British Columbia, $94,015.

† Mass surveys, 548,605.

TABLE 24.—EXPENDITURE AND SOURCE OF FUNDS OF TUBERCULOSIS HOSPITALS[1], 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics, unless otherwise noted)

(thousands of dollars)

—	Total Expenditure	Source of Funds					
		Total	Grants		Dominion payments for patients	Income from paying patients	Donations and miscellaneous
			Provincial	Municipal			
CANADA	**9,056**	**8,725**	**4,761**	**1,811**	**906**	**613**	**635**
Prince Edward Island	81	78	48	1	10	18	1
Nova Scotia[1]	415	415	183	104	77	50	1
New Brunswick	571	549	215	214[2]	70	25	25
Quebec[1]	1,732	1,675	663[3]	663[3]	59	176	114
Ontario	3,523	3,320	2,178	21	373	265	483
Manitoba[1]	520	473	101	300[4]	27	36	9
Saskatchewan	846	847	287	394	160	4	2
Alberta	421	421	369	—	50	2	—
British Columbia	947[5]	947[5]	717	114	79	37	—

[1] Excludes hospitals operated by the Indian Health Service of the Department of National Health and Welfare. Tuberculosis treatment cost in these institutions was approximately 285 in 1944-45. Tuberculosis units in general hospitals are also excluded. If they were included, total expenditure would be increased by approximately 1,650, distributed as follows: Nova Scotia 200, Quebec 1,320, Manitoba 130. The Manitoba estimate represents expenditure by the city of Winnipeg for the maintenance of the King Edward Hospital, and may include provincial grants of approximately 20.

[2] Part of this amount was paid to the municipalities out of the provincial Tuberculosis Fund (Tobacco Tax).

[3] Municipal payments made through the province have been arbitrarily allocated to the municipalities. The Public Charities Act, under which these payments were made, provides for equal contributions by province and municipality. Municipal contributions to tuberculosis units in general hospitals are included in the estimated total for the province, as shown in Footnote 1.

[4] Paid in part through the Municipal Commissioner's levy. See also Footnote 1.

[5] Includes special services, 121.

As far as possible veterans are cared for in provincial sanatoria, but the need for additional accommodation for these patients has led to the development of facilities for the treatment of tuberculosis within the Department of Veteran Affairs. At the end of July 1946, some 1,200 D.V.A. cases were being cared for in provincial sanatoria, and an additional 900 cases in departmental hospitals. Actual beds set up for tuberculosis cases in veterans hospitals numbered 1,147 at July 31, 1946.

The Indian Health Services Division of the Department of National Health and Welfare operates a programme of tuberculosis prevention along with its general health programme, provides treatment for tuberculous Indians in departmental hospitals, and meets the cost of care of those treated in general hospitals or sanatoria under private or provincial auspices.

Because of the prevalence of tuberculosis among Indians, control activities are a major part of the whole programme undertaken by the division and its field staff. (See General Public Health section.) As a result of experiments undertaken over a period of years in Saskatchewan and Quebec, it has been possible to extend the use of B.C.G. vaccine for the immunization of Indian children and, where indicated, adults. Attempts are being made to develop new methods of administering the vaccine so that it may be adapted for use among the nomadic Indians of the north.

Expenditures on tuberculosis control activities among Indians amounted to $574,049 in 1944-45 and $598,681 in 1945-46. This is exclusive of headquarters administration and hospital care expenditures.

It is not possible to segregate expenditures for tuberculosis medical care, but it is probable that a major part of the $1,133,030 spent on medical care in 1945-46 was directed toward the treatment of this disease.

It is estimated that an additional $409,000 was spent on hospital care of tuberculosis patients in hospitals administered by the Indian Health Service.

Proposed Dominion Grants for Tuberculosis

Health grants proposed at the Dominion-Provincial Conference in 1945 included a grant to assist the provinces in providing adequate services for the control of tuberculosis. In the form proposed at the April 1946 meetings of the Conference, a tuberculosis grant of $3,000,000 annually was to be paid to the provinces, with a minimum of $25,000 to each province and the remainder distributed fifty per cent on the basis of population and fifty per cent according to the average number of deaths from tuberculosis over the previous five years. At the end of two years a supplementary grant of $1,000,000 annually would be made available for ten years to provincial governments able to make effective use of it.

The grant would be distributed as indicated in the following table:

PROPOSED TUBERCULOSIS GRANT

(thousands of dollars)

Province	At Introduction	At Maximum
Prince Edward Island	50·4	58·9
Nova Scotia	190·5	250·0
New Brunswick	138·6	182·6
Quebec	1,050·4	1,419·4
Ontario	733·5	988·5
Manitoba	194·9	256·4
Saskatchewan	192·8	252·8
Alberta	191·9	251·4
British Columbia	257·0	340·0
Total cost to the federal government	3,000·0	4,000·0

PROVINCIAL ACTIVITIES

The various provinces have different arrangements for carrying out their programmes of tuberculosis control. Provisions for meeting the costs of care also vary. Provincial organization and arrangements for treatment are summarized briefly in the following:

Prince Edward Island—Treatment of tuberculosis in Prince Edward Island is centralized in the Provincial Sanatorium at Charlottetown, operated under the Provincial Sanatorium Commission but almost entirely financed by the provincial government. Patients who are able financially to do so are required to pay for treatment.

Municipalities are not liable for the cost of treatment of indigent residents, the province itself being the unit for financial responsibility. In addition to sanatorium care, extramural treatment of indigent tuberculous patients is provided at provincial expense.

A complete X-ray survey of the province is now being made by the Tuberculosis League with the cooperation of the Department of Health and Welfare and the Sanatorium Commission. Voluntary funds contributed during the Christmas seal campaign are utilized for these mass X-rays and the extension of nursing services.

Nova Scotia—The Province of Nova Scotia owns and operates the Nova Scotia Sanatorium at Kentville and the Roseway Hospital at Shelburne. Seven of the Provincial Public Hospitals have units for the treatment of persons suffering from tuberculosis and Halifax City operates a Tuberculosis Hospital.

On July 1, 1946, free institutional treatment became effective. The Province pays for all cases admitted and no charge is made either to the patient or to the municipality. Certain stipulated per diem rates are paid for the treatment of patients to the hospitals not operated by the province.

Christmas Seal contributions are used to assist in the development of community services, and for mass X-rays.

New Brunswick—The provincial government assumed full responsibility for the cost of care and treatment of tuberculous patients in New Brunswick

from January 1, 1945, so that free care is available to all patients and the municipalities are relieved of financial obligation. The province operates the Jordan Memorial Sanatorium and there are four other sanatoria in the province, one of which is operated by the municipality of the City and County of Saint John. New hospitals acquired from the armed forces during 1946 have increased available accommodation by 350 beds.

Christmas Seal funds are utilized chiefly for nursing services and the extension of X-ray diagnosis.

Quebec—The Department of Health is responsible for the Quebec tuberculosis prevention programme and for the administration of grants to sanatoria.

Tuberculosis prevention is carried out through provincial and local health agencies, provincial grants being made for educational activities, diagnosis and special measures for the protection of children in large cities. Treatment for tuberculous patients is given in hospitals operated under private auspices. Patients who can pay for treatment are required to do so, but upon proof of poverty by the patient, public contributions are made towards the cost of care. Approved sanatoria receive these grants through the Public Charities Fund, one-third of the total cost of the care of needy persons being met by the province, one-third by the municipality where the patient is domiciled and one-third by the sanatorium itself.

Grants vary with the institution and the type of care given. Large hospitals receive a per patient per diem rate of $3 or $4.50 (for a maximum of 50 days) for patients requiring thoracic surgery. Smaller hospitals receive grants of $2.01 per day for each public ward patient.

In 1946 an extensive building programme was announced, $10,000,000 to be spent within four years on treatment facilities for tuberculous patients. An advisory board was constituted to promote tuberculosis control measures, and provision was made for the appointment of a Director-General.

Voluntary funds support mass surveys in Montreal, supplement provincial funds used for this purpose in other parts of the province, and maintain a variety of miscellaneous activities directed toward tuberculosis control.

Ontario—Tuberculosis control activities in Ontario are carried out through provincial and local preventive programmes and through hospitalization in sanatoria administered by private or municipal authorities under the supervision of the Division of Tuberculosis Prevention of the Provincial Health Department.

Persons who are able to pay for sanatorium care are expected to do so but municipalities are no longer liable in cases of indigency. The province pays for the maintenance of all patients in sanatoria at a per diem rate ranging from $2.10 to $2.85, depending on the nature and quality of the services rendered by the sanatorium.

The province has made provision for compulsory treatment of tuberculosis, and developed an after-care programme for which municipalities are responsible. Educational activities and the extension of diagnostic facilities are carried out through the provincial Division of Tuberculosis Prevention and local boards of health.

Christmas Seal funds are directed toward clinic service and community mass X-rays, which are made in co-operation with the Provincial Department of Health.

Manitoba—Legislation was enacted in Manitoba in 1944 for the co-ordination of diagnosis, prevention and treatment of tuberculosis under a provincial Commission. No director has yet been appointed, however, and the actual work of administering grants is carried out by the Manitoba Sanatorium Board, which also operates the Ninette Sanatorium and the Central Tuberculosis Clinic.

Patients with tuberculosis in Manitoba are provided with treatment free of charge.

Cities pay a per patient per diem rate of $1.80 while other municipalities are charged, not on the basis of care given to their residents, but as a group, through the equalized Municipal Commissioner's levy. This portion of the levy amounts to not more than $175,000 annually. Costs for patients from unorganized municipalities are met by the province, which also makes a statutory grant of 50 cents per diem for all patients in sanatoria.

Christmas Seal funds support travelling clinics and mass X-ray surveys.

Saskatchewan—The treatment of all patients with tuberculosis who are residents of Saskatchewan is under the direction of the Anti-Tuberculosis League. This organization, supported by both provincial and municipal governments, operates sanatoria and clinics, and carries out a tuberculosis prevention programme.

The province makes a contribution of $1.00 per diem per patient to sanatoria operated by the League and to approved hospitals. The cost of maintenance apart from the provincial contribution is divided between the urban and rural municipalities on a prolateral basis of equalized assessment. The present apportionment is on the basis of 40 per cent to urban and 60 per cent to rural municipalities.

Extensive experiments with the use of B.C.G. vaccine have been carried out in Saskatchewan. Demonstration of the efficacy of this procedure in Saskatchewan has led to the development of an immunization programme for Indians carried out jointly by provincial and Dominion authorities.

Voluntary funds expended through the Anti-Tuberculosis League support all clinics and mass X-ray surveys in the province.

Alberta—The prevention of tuberculosis and the treatment of patients is the direct responsibility of the provincial government. All persons establishing a resident status receive free diagnosis and those suffering from infectious tuberculosis are given free hospitalization and treatment. If such patients are cared for in hospitals other than those operated by the provincial government, they receive a per diem contract payment of $3.00.

When other cases of tuberculosis are admitted to approved hospitals, the province makes a grant of 45 cents per patient per day.

Voluntary contributions to the Christmas Seal Fund are utilized for the purchase of equipment, the organization of mass surveys and for nursing service supplementary to that provided by the regular public health nursing programme.

British Columbia—Central control and unification of all facilities are made effective in British Columbia through the Division of Tuberculosis Control of the Department of Health and Welfare, which is responsible for provincial sanatoria and for related programmes of prevention and rehabilitation.

Public assistance plans in the province have been extended to provide special allowances to maintain the dependents of persons being treated for tuberculosis.

Foster-home and after care programmes are facilitated by use of the generalized provincial welfare field service.

Persons who can pay for care in tuberculosis institutions are required to do so, the rate being $3.00 a day.

Municipalities pay 80 cents a day, or an approved fixed grant, for indigent residents given sanatorium care, and all other provincial sanatorium costs are met by the province.

A per diem rate of $1.25 is paid by the province for each patient treated in a public hospital, irrespective of the number of days' treatment in any year. The municipal obligation to public hospitals for the care of tuberculous patients must not exceed 70 cents per day.

Christmas Seal funds are used to buy mass survey equipment and for educational work.

SOURCES:

Canadian Tuberculosis Association, Dr. G. J. Wherrett, Secretary.

Provincial Departments of Health.

Department of National Health and Welfare: Dr. Percy Moore, Chief, Indian Health Services Division.

Department of Veterans Affairs: Dr. H. A. Procter, Treatment Branch.

9. MENTAL HEALTH

The wide field of mental illness constitutes the largest special medical and hospital problem in Canada. Psychiatry has expanded tremendously within recent years.

Problems of mental health and ill health begin in the early years of childhood and continue in the school where cases of retarded mental development are often first recognized and perhaps reversible symptoms of actual mental illness are also observed. Later, in industry, success or failure may be as much a question of mental stability as of physical fitness. An unfortunate distinction has developed between these two phases of health, with sinister implications for the patient suffering from "mental illness", but there is a growing recognition that treatment and prevention must be prepared to give full consideration to mental as well as to the physical aspects of personal and community health.

Mental hygiene programmes involve the application of preventive principles to illnesses and difficulties of early childhood and of school children, to industrial disabilities relating to fatigue, friction and general inefficiency, and to the psychological aspects of disturbed home and family relationships. Treatment involves the application of any possible corrective measures for all such conditions. Most of these problems are matters concerning the mental health and stability of the individual and of the community. They need treatment like other disabilities, but do not require hospitalization at all. They are problems of the increasingly important field of preventive medicine in its broader interpretation.

Mental Disorders—Neuroses, often called "nervous" conditions, are mental disorders which are very numerous among children and adults. Most cases can be treated at home or by office practice. If hospitalization is needed, most of these cases can be cared for in general hospitals, very few requiring mental hospital care.

Cases of psychosis or "insanity" comprise the largest group requiring hospitalization. During the incipient stages intensive treatment at home, by a mental health clinic, or in a psychiatric ward in a general hospital may prevent acute symptoms and lead to recovery.

Where such treatment is unsuccessful mental hospital facilities are necessary, standard requirement being hospital accommodation for four persons in every thousand of the general population.

The Epilepsies—Epileptic persons constitute about 250 to 400 per 100,000 of the population, most of whom can be treated at home or by office practice. Severe cases require special hospital facilities at the rate of 25 beds per 100,000 of the general population.

Mental Defect—Mentally defective persons constitute 1,000 to 1,500 per 100,000 of the general population, but only 100 to 150 require special institutions for training, treatment and care. The great majority can be cared for at home and trained in auxiliary classes of the school system.

Addiction to Alcohol and Narcotic Drugs—Habituate cases, comprising the smallest group of psychopathic states, represent a distinct problem in treatment. Addictions are closely related to mental disorders, but involve special equipment and treatment facilities.

PREVENTION AND TREATMENT

Trained personnel and adequate facilities are essential requirements in the development of prevention and treatment phases of a comprehensive mental hygiene programme.

Personnel

Until recently, nearly all the care of the mentally ill has been on the treatment side, but it is well recognized that in the future adequate personnel must be provided to deal with both preventive and curative aspects of mental illness.

To develop personnel qualified to deal with mental health needs, special training is necessary for workers in several related fields. Curricula in medical schools may need to be amplified if students are to be qualified in preventive psychiatry as in preventive medicine generally, and opportunities are required for physicians in practice to obtain training and experience in the field.

Training in mental hygiene for undergraduates and graduates in the allied services—nursing, social service, occupational therapy and education—would qualify workers in these fields for effective participation in different phases of comprehensive mental health programmes.

Facilities

In addition to the out-patient services of general hospitals and the treatment given in mental institutions, which have been the principal means of dealing with psychiatric disorders, additional facilities are necessary to meet special needs. These include:

Mental health clinics—These clinics are required for consultation and treatment, particularly of less severe or incipient conditions. One such clinic can serve approximately 200,000 people in urban areas or 100,000 in rural districts.

Psychiatric wards in general hospitals—The realization that the mentally sick are really sick people who may need very complete examinations and consultations for diagnosis and adequate treatment calls for the establishment of properly equipped wards in all general hospitals of fifty beds or more (and at least one or more properly equipped rooms in smaller hospitals). Such a ward would be for short treatment only: prolonged illnesses would be cared for in mental institutions.

TABLE 25.—PATIENTS RESIDENT IN MENTAL INSTITUTIONS ACCORDING TO MENTAL STATUS, 1935 AND 1944

(Source: Institutional Statistics Branch, Dominion Bureau of Statistics)

	Number of Patients at December 31, 1935					Number of Patients at December 31, 1944					Percentage Increase		
	Total	Insane	Mental Defectives	Epileptics	All Other Types	Total	Insane	Mental Defectives	Epileptics	All Other Types	Total	Insane	Mental Defectives
CANADA	**38,251**	**30,208**	**7,261**	**601**	**181**	**47,279**	**35,869**	**10,392**	**729**	**289**	**23·60**	**18·74**	**43·12**
Prince Edward Island	256	250	5	—	1	274	263	5	1	5	7·03	5·20	—
Nova Scotia	1,997	1,673	311	13	—	2,236	1,858	355	19	4	11·97	11·06	14·15
New Brunswick	961	767	126	65	3	1,285	989	199	76	21	33·71	28·94	57·94
Quebec	11,001	8,052	2,685	184	80	14,074	9,816	3,908	277	73	27·93	21·91	45·55
Ontario	13,096	10,368	2,326	325	77	15,140	11,614	3,110	299	117	15·61	12·02	33·71
Manitoba	2,578	2,094	468	8	8	3,024	2,401	589	10	24	17·30	14·66	25·85
Saskatchewan	2,943	2,392	543	2	6	4,169	3,120	1,002	31	16	41·66	30·43	84·53
Alberta	2,255	1,919	326	4	6	3,069	2,551	486	14	18	36·10	32·93	49·08
British Columbia	3,164	2,693	471	—	—	4,008	3,257	738	2	11	26·68	20·94	56·69

TABLE 26.—INCREASE IN NUMBER OF MENTAL HOSPITAL PATIENTS, 1934 TO 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Number of Resident Patients				Resident Patients per 100,000 Population			
	At December 31, 1934	At December 31, 1944	Increase	Per cent increase	At December 31, 1934	At December 31, 1944	Increase	Per cent increase
CANADA	**36,571**	**47,279**	**10,708**	**29·28**	**336**	**395**	**59**	**17·56**
Prince Edward Island	255	274	19	7·45	286	301	15	5·24
Nova Scotia	1,932	2,236	304	15·73	367	365	—	—
New Brunswick	929	1,285	356	38·32	218	278	60	27·52
Quebec	10,416	14,074	3,658	35·12	342	402	60	17·54
Ontario	12,473	15,140	2,667	21·38	348	382	34	9·77
Manitoba	2,496	3,024	528	21·15	339	413	74	21·83
Saskatchewan	2,800	4,169	1,369	48·89	288	493	205	71·18
Alberta	2,133	3,069	936	43·88	275	375	100	36·36
British Columbia	3,137	4,008	871	27·77	429	430	1	0·23

Hospitals for the Elderly Mentally Ill—It is important that elderly persons, who constitute an increasingly large proportion of citizens, receive the medical attention necessary for their welfare. People above the age of sixty now comprise more than 20 per cent of the admissions to mental hospitals, adding definitely to the conditions of overcrowding. Hospitals for elderly people should be suitably staffed and equipped to care for all types of illness common to advancing years, including mental illness.

Family Care for Mentally Sick Persons—Under the family care system selected patients are placed in approved homes in a community within convenient access to the hospital, where the patient can be cared for with a minimum of supervision and lead as active a life as possible.

The boarding-out system provides the most suitable form of treatment for many patients, relieves institutional overcrowding, and reduces the need for new construction.

MENTAL HYGIENE SERVICES

Mental hygiene services in Canada are administered by provincial and local health and welfare departments, actual treatment being carried out in 59 mental institutions.

These include: 32 hospitals for the mentally ill, in all provinces; five provincial training schools for mental defectives, in Nova Scotia, Quebec, Ontario, Manitoba and Alberta; two psychiatric hospitals, in Toronto and Winnipeg; fifteen local institutions, all in Nova Scotia; two hospitals for veterans, operated by the Dominion Government, and three private sanitaria.

The number of patients under treatment in these institutions has risen sharply in recent years. This is shown in Table 25, which compares the number of patients in 1935 with that in 1944, according to mental status.

The increase in the numbers of hospitalized cases of mental illness has been more rapid than population growth. In all provinces, the proportion which such patients bear to the general population showed an increase between December 31, 1934 and the same date in 1944. This is indicated in Table 26.

The striking increase is regarded as due to a variety of factors, including the ageing of the general population so that the older groups with higher psychotic incidence are relatively larger, the extension of diagnostic facilities leading to the recognition of milder cases of mental illness, the growing tendency to hospitalization, and an apparent increase in mental illness in comparison with population growth.

The wide differences between provinces may be attributed to variation in all these factors, age distribution having particular importance in the prairie provinces. Changes in the extent of opportunities for hospital care are reflected in Table 27. Comparison of Tables 26 and 27 indicates that the increase in hospital facilities between 1935 and 1944 was not sufficient to overcome the initial deficiency and keep pace with changing needs.

OVERCROWDING AND INSTITUTIONAL REQUIREMENTS

Most Canadian mental hospitals are overcrowded, average patient population exceeding normal bed capacity in all provinces except Prince Edward Island and Nova Scotia. As indicated in Table 28, this does not necessarily mean that existing bed accommodation is adequate in these provinces. The extent of overcrowding, as indicated by excess of patient population over normal capacity, is shown in Table 27 which also indicates the increase in hospital accommodation between 1935 and 1944.

TABLE 27.—BED CAPACITY OF MENTAL INSTITUTIONS, 1935 AND 1944, AND PATIENT POPULATION, 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Normal Bed Capacity 1935	Normal Bed Capacity 1944	Per Cent Increase	Average Daily Patient Population, 1944	Per Cent Excess of Average Daily Population Over Bed Capacity, 1944
CANADA	**35,987**	**42,500**	**18·10**	**47,498**	**11·76**
Prince Edward Island	275	275	—	274	—
Nova Scotia	2,120	2,546	20·09	2,278	—
New Brunswick	900	1,150	27·78	1,252	8·87
Quebec	10,383	13,150	26·65	14,115	7·34
Ontario	12,777	14,497	13·46	15,330	5·75
Manitoba	2,492	2,578	3·45	3,023	17·26
Saskatchewan	2,550	2,970	16·47	4,156	39·93
Alberta	2,035	2,873	41·18	3,090	7·55
British Columbia	2,455	2,461	·24	3,980	61·72

Overcrowding of mental hospitals varies in extent from province to province. British Columbia, which shows the highest degree of overcrowding, had the smallest increase in accommodation between 1935 and 1944. Saskatchewan, where overcrowding was second highest, had the greatest increase in hospitalized mental illness. Substantial increases in hospital accommodation in Quebec, Ontario and Alberta are reflected by less overcrowding.

Comparison of the number of beds available and the average patient population indicates only the extent of existing accommodation in terms of the number of persons actually receiving hospital care.

The adequacy of existing facilities may also be measured in relation to standard requirements based on population. Table 28 provides the data for comparing Canadian institutional accommodation with the standards which have been described on page 47.

Shortage of facilities for the training of mental defectives is greater than that for the treatment of the mentally ill. It is possible that this might not be the case if a distinction could be made between facilities

TABLE 28.—CANADIAN FACILITIES AND REQUIREMENTS IN RELATION TO STANDARDS FOR MENTAL INSTITUTIONS, 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Estimated Population (thousands)	Hospitals for the Mentally Ill and Epileptic			Schools for the Mentally Defective			Total New Beds Required
		Beds Required: Standard 425 per 100,000 Population	Normal Bed Capacity	New Beds Required	Beds Required: Standard 125 per 100,000 Population	Normal Bed Capacity	New Beds Required	
CANADA	**11,958**	**50,822**	**39,522**	**11,300**	**14,948**	**4,828**	**10,120**	**21,420**
Prince Edward Island	91	387	275	112	114	—	114	226
Nova Scotia	612	2,601	2,391	210	765	155	610	820
New Brunswick	462	1,964	1,150	814	578	—	578	1,392
Quebec	3,500	14,875	12,200	2,675	4,375	950[1]	3,425	6,100
Ontario	3,965	16,851	13,897[2]	2,954	4,956	2,450[3]	2,506	5,460
Manitoba	732	3,111	2,038	1,073	915	540	375	1,448
Saskatchewan	846	3,596	2,970	626	1,058	—	1,058	1,684
Alberta	818	3,476	2,591	885	1,022	282	740	1,625
British Columbia	932	3,961	2,010	1,951	1,165	451[4]	714	2,665

[1] Includes 450 beds formerly Ecole la Jemmerais at Mastai and 500 beds in the St. Jean de Dieu Hospital at Gamelin. This latter group of patients will be transferred to the new 1,000-bed institution for mental defectives at Montreal when it is completed in 1947.

[2] This includes the 1,850-bed Ontario Hospital at St. Thomas, which was leased to the Dominion government from 1939 to 1945 for use as an R.C.A.F. training centre.

[3] Includes 250 beds used for treatment of mental defectives at the Ontario Hospital, Cobourg.

[4] Estimate based on the number of mental defectives in the British Columbia system of mental hospitals. The unit at New Westminster provides training facilities for these patients. There were 625 mental defectives receiving treatment in August 1946.

TABLE 29.—RESIDENT AND NON-RESIDENT PATIENTS UNDER CARE OF CANADIAN MENTAL INSTITUTIONS, DECEMBER 31, 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Total	In Hospital		Boarding Out		On Parole	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
CANADA	**51,776**	**47,279**	**91·31**	**529**	**1·02**	**3,968**	**7·66**
Prince Edward Island	274	274	100·00	—	—	—	—
Nova Scotia	2,322	2,236	96·30	—	—	86	3·70
New Brunswick	1,708	1,285	75·23	—	—	423	24·77
Quebec	16,019	14,074	87·86	—	—	1,945	12·14
Ontario	16,822	15,140	90·00	519	3·09	1,163	6·91
Manitoba	3,157	3,024	95·79	10	·32	123	3·89
Saskatchewan	4,169	4,169	100·00	—	—	—	—
Alberta	3,115	3,069	98·52	—	—	46	1·48
British Columbia	4,190	4,008	95·66	—	—	182	4·34

for custodial care only and those for actual psychiatric treatment of the mentally ill.

Minimum standards for mental hospital accommodation include not only a specified number of beds in relation to the population, but also facilities and equipment necessary for care and treatment of patients. To build a properly constructed and equipped hospital to accommodate 1,000 to 2,000 patients would cost from $2,500 to $4,000 per bed. Additions to existing institutions could be built in most cases for $1,500 to $2,000 per bed.

Family care of mentally sick persons can obviate the heavy capital outlay and maintenance charges for many patients which would have to be undertaken if all the mentally ill were to be treated in institutions. The actual cost of patients in institutions varies in individual provinces, but is ordinarily greater than the costs of family care.

Two provinces, Ontario and Manitoba, have initiated programmes of family care for mentally sick persons in supervised boarding homes. All the provinces except Saskatchewan and Prince Edward Island have parole systems in effect, New Brunswick, Quebec and Ontario having the highest proportions of paroled patients.

Table 29 shows the proportion of resident and non-resident patients under care of Canadian mental institutions.

COSTS OF TREATMENT

Expenditures of Canadian mental institutions in the various provinces in 1944 are shown in Table 30 together with an analysis of sources of funds.

TABLE 30.—EXPENDITURE AND SOURCE OF FUNDS OF MENTAL INSTITUTIONS, 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics, unless otherwise noted)

(thousands of dollars)

—	Total Expenditure		Source of Funds					
	Maintenance	Capital and Other	Total	Province	Municipalities	Dominion payments for patients	Income from paying patients	Other
CANADA	**19,863**	**2,340**	**22,189**	**12,460**	**1,770**	**3,564**	**3,139**	**1,256**
Prince Edward Island	169	—	169	138	—	—	24	7
Nova Scotia	776	23	802	255	447	5	67	28
New Brunswick	481	7	481	185	230	—	63	3
Quebec	5,498	1,522	6,953	2,607[1]	733[1]	2,185	829	599
Ontario	7,209	598[1]	7,855[1]	4,707[1]	260	1,220	1,289	379
Manitoba	1,147	7	1,154	864	88	37	123	42
Saskatchewan	1,666	103	1,769	1,404	—	—	204	161
Alberta	1,183	80	1,265	954	12	17	247	35
British Columbia	1,734	—	1,741	1,346	—	100	293	2

[1] Adjusted on the basis of information in provincial Public Accounts.

Saskatchewan is the only province providing free treatment for patients suffering from mental illness, the provincial programme of free care to residents having been initiated there January 1, 1945. In all other provinces, those who can pay for care are required to do so, the cost for indigent patients being shared in some instances between the provincial and the municipal authority.

In British Columbia, Manitoba, Prince Edward Island and Quebec, as well as in Saskatchewan, municipalities make no contributions towards mental hospital costs. Provincial assumption of what were formerly municipal costs in Quebec was made effective at the beginning of 1945.

FEDERAL ACTIVITIES

Activities of the Dominion government in the field of mental health include the programme of research and education being developed by the Division of Mental Health established in 1945 as part of the Department of National Health and Welfare, and the actual operation of two mental hospitals by the Department of Veterans Affairs. Other veterans requiring psychiatric care are treated in provincial institutions at the expense of the Dominion government. At August 1, 1946, there were 1,264 mental hospital beds in these two D.V.A. hospitals, 1,108 patients being given care. An additional 492 patients were being cared for in provincial mental institutions at the expense of the government.

Indian and Eskimo patients are also treated in provincial institutions at the expense of the Dominion government. In 1945 there were 194 such patients given 55,600 days' care in 22 mental hospitals.

Where arrangements can be made with provincial authorities, persons who become mentally ill while serving sentences in federal penitentiaries are cared for in provincial mental hospitals. In 1944-45, there were 54 such convicts on the register of federal prisons.

Proposed Grants for Mental Health

Health grants to be paid to the provinces by the Dominion according to proposals made at the Dominion-Provincial Conference in April, 1946, included a mental health grant of $4,000,000 to be paid annually, with a minimum of $25,000 to each province and the remainder distributed according to population. This total grant would be increased to $5,000,000 at the end of two years, $6,000,000 at the end of four years and $7,000,000 at the end of six years, if the provincial governments demonstrated they could make effective use of such amounts. The supplementary grant was to be distributed on the basis of population.

Ten years after its introduction the Mental Health Grant and the supplementary grant are to be reviewed by the Governor in Council, in consultation with the Dominion Council of Health, with a view to determining the adequacy of the grant in the light of conditions at that time.

The following table, which indicates the amount of the proposed mental health grants, shows the maximum grant payable when the grants are introduced and when the full supplementary grants are in effect.

PROPOSED MENTAL HEALTH GRANT

(thousands of dollars)

Province	At Introduction	At Maximum
Prince Edward Island	56·3	81·2
Nova Scotia	214·9	365·8
New Brunswick	175·2	294·6
Quebec	1,119·8	1,989·8
Ontario	1,269·6	2,258·7
Manitoba	264·7	455·2
Saskatchewan	319·1	552·8
Alberta	286·6	494·5
British Columbia	293·8	507·4
Total cost to the federal government	4,000·0	7,000·0

The grants are to be conditional upon free treatment being provided for all persons suffering from metal illness and for mental defectives.

PROVINCIAL ACTIVITIES

Mental hygiene programmes vary from province to province, as do provisions for meeting the costs of care. Provincial organization and arrangements for treatment are summarized briefly in the following:

Prince Edward Island—Mental hygiene services are made available to the people of Prince Edward Island through the treatment facilities for the mentally ill provided at the Falconwood Hospital in Charlottetown. This is a provincial institution, operated along with the provincial infirmary.

Persons receiving mental hospital treatment are required to pay if they are financially able to do so, and the balance of the cost is met by the province. Municipalities have no financial responsibility in connection with the treatment of indigent patients.

Nova Scotia—Nova Scotia has a mental hospital and a school for mental defectives operated by the Province and fifteen local institutions providing custodial care. The latter account for three-quarters of the nominal capacity of the Nova Scotia mental institutions.

A charge is made in all institutions for all who are financially able to pay. In the case of those admitted to the Nova Scotia Hospital who do not pay, a charge of nine dollars a week is levied on their municipalities of settlement and all deficits are absorbed by the Province. For each person cared for in the training school the municipality of settlement is charged $200.00 a year and the balance of cost is absorbed by the Province. Local institutions are maintained wholly at municipal expense.

In addition to the Nova Scotia Hospital and the Nova Scotia Training School, each of which is operated by the Province, there is a Provincial Psychiatrist attached to the Department of Public Welfare.

A mental health programme is carried out in the City of Halifax through the facilities of the Dalhousie Health Centre.

New Brunswick—Treatment for the mentally ill in New Brunswick is provided in the Provincial Hospital at Fairville. Payment is required on behalf of patients

where financial circumstances warrant it, municipal authorities contributing $2 weekly toward the costs of treatment for indigent residents. All other costs are met by the provincial government, which has full administrative responsibility. A small number of low grade mental defectives are given custodial care in the Provincial Hospital. No training programme for Mental Defectives is in operation.

Quebec—There are six mental hospitals and a school for mental defectives in the Province of Quebec, as well as a Dominion government hospital for veterans and a private institution for the mentally ill. Special treatment for insane criminals is provided in the hospital at Bordeaux.

Special treatment facilities for the mentally defective are available in the mental hospitals at Mastai and Gamelin. A special 1,000-bed institution for mental defectives is to be constructed in Montreal in 1947, and 500 patients transferred to it from the St. Jean de Dieu hospital at Gamelin.

The government of Quebec assumed responsibility for the maintenance of indigent patients in provincially supported mental hospitals from January 1, 1945. Previously, the municipality of domicile was responsible for half these costs. Maintenance charges are collected from persons legally responsible for patients, and in a position to pay for treatment.

Extensive mental health and psychiatric programmes are carried out locally in the province, notably in the city of Montreal, under private and university auspices.

Ontario—The Hospitals Branch of the Ontario Health Department administers twelve mental hospitals, a hospital for epileptics, a hospital school for mental defectives, and under special arrangements, a psychiatric hospital in the city of Toronto.

Travelling clinics for diagnosis and out-patient treatment are operated by the Branch, which also co-operates with municipal authorities in the development of local mental hygiene programmes.

Where the family or the patient can afford to pay, they are charged for treatment. Otherwise, the cost is met by the province.

Municipalities contribute 10 cents a day for indigent patients, up to the amount payable to them by the province under the statutory provision for the distribution of the provincial railway tax. For indigent patients in the provincial hospital for epileptics, municipalities pay 50 cents a day. Toronto and York Township, and in certain cases other municipalities may send patients to the Toronto Psychiatric Hospital, municipal liability for costs being limited to ten days for each patient at $1.50 a day.

The Dominion government operates a mental hospital for veterans in the Province of Ontario, and there is one private hospital giving treatment to the mentally ill.

Manitoba—The Province of Manitoba operates two mental hospitals, a school for mental defectives and, under special arrangement, a psychopathic hospital in Winnipeg. The province provides all facilities for care, no charge being made against the municipalities. From inidividuals who can afford to pay, the province collects from 50 cents to the full rate of $1.25 a day, the charge being fixed in relation to ability to pay.

Diagnostic clinics and out-patient treatment facilities are provided in Winnipeg and Brandon through the provincial service, which also co-operates with municipal authorities in the development of their mental hygiene programmes.

Saskatchewan—The Province of Saskatchewan through its Department of Health, operates two hospitals for the mentally ill, and has psychopathic hospital services through a special arrangement with the Regina General Hospital.

The Department has also established a School for Mental Defectives at Weyburn, and has planned the development of a training programme for this class of patients.

Subject to certain minor limitations, persons fulfilling residence requirements are entitled to care and treatment at the expense of the province. No charge is made either to the patient or to the municipality from which he comes.

Alberta—The Alberta Department of Public Health administers two provincial mental hospitals, two auxiliary hospitals, and a training school for mental defectives as well as a comprehensive mental hygiene programme including preventive service, diagnostic facilities, family care for the mentally ill and rehabilitation.

Guidance clinics have also been developed as part of the mental hygiene programme.

Where relatives are in a position to pay for treatment of a patient, the province makes a charge of $1 a day for care in mental hospitals. There is no municipal responsibility for treatment of indigent patients.

The Department of Public Health makes a charge of $15 a month for the maintenance of mentally defective persons in the provincial school. The municipality of residence is responsible for this charge, which may be recovered from persons liable for maintenance of the patient.

The Alberta Eugenics Board, set up under the Sexual Sterilization Act of 1928 operates within the Mental Health Division of the Department of Public Health.

British Columbia—The provincial mental hygiene programme in British Columbia is administered under the Department of the Provincial Secretary. The three provincial hospitals are administered as a unit, along with the Psychopathic Division, under the Provincial Psychiatrist, who also has charge of related mental health services.

No municipal charges are in effect in British Columbia, but a charge of $1 per day is made for patients who are financially able to pay for treatment.

Rehabilitation and follow-up work in connection with the provincial mental hygiene programme is carried out throughout the province by the generalized provincial welfare field service.

In addition to the public hospitals, there is a private sanitarium giving care to the mentally ill in British Columbia.

One of the Provincial Mental Hospitals is devoted to a training programme for the subnormal and for mental defectives.

SOURCES:

Brief on Mental Diseases presented to the House of Commons Special Committee on Social Security by the late Dr. B. T. McGhie, former Deputy Minister of Health for Ontario, May 18, 1943.

Department of National Health and Welfare: Dr. C. G. Stodgill, Chief, Mental Health Division.

10. GENERAL PUBLIC (ACUTE DISEASE) HOSPITAL CARE

HOSPITAL ACCOMMODATION

Canada has a comprehensive system of hospitals for the treatment of patients suffering from acute and chronic diseases, and for providing care for maternity cases. In 1944 the total bed capacity of hospitals reporting from this group, excluding those operated by the Dominion Government, was 67,155. The distribution of hospital beds in the various provinces is shown in Table 31, according to the type of hospital.

TABLE 31.—NUMBER AND BED CAPACITY[1] OF HOSPITALS[2] IN CANADA BY TYPE OF HOSPITAL, 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Public								Private		Total	
	Acute Disease[3]		Chronic and Incurable		Contagious Diseases		Convalescent					
	Number	Beds	Number	Beds	Number	Beds	Number	Beds	Number	Beds	Number	Beds
CANADA	**559**	**56,758**	**18**	**3,602**	**11**	**1,500**	**9**	**737**	**266**	**4,558**	**863**	**67,155**
Prince Edward Island	4	315	—	—	—	—	—	—	—	—	4	315
Nova Scotia	32	2,938	—	—	1	73	—	—	—	—	33	3,011
New Brunswick	18	1,864	1	33	—	—	—	—	7	155	26	2,052
Quebec	75	15,163	3	909	4	643	3	375	53	1,400	138	18,190
Ontario	141	16,702	8	1,474[4]	3	479	5	306	53	1,052	210	20,013
Manitoba	39	3,802	1	420	1	200	1	56	7	119	49	4,597
Saskatchewan	86	4,293	2	227[5]	—	—	—	—	84	780	172	5,300
Alberta	88	5,711	2	175	2	105	—	—	26	199	118	6,190
British Columbia	76	5,970	1	364	—	—	—	—	36	853	113	7,187

[1] Includes beds, cribs and bassinets.
[2] Includes only hospitals reporting to the Dominion Bureau of Statistics, other than Dominion government hospitals, tuberculosis sanatoria and mental hospitals. The classification by type of hospital is not precisely comparable with previous years.
[3] Includes tuberculosis units and contagious disease units in general hospitals.
[4] Includes two hospitals (320 beds) not reporting to the Dominion Bureau of Statistics.
[5] Includes one hospital (97 beds) not reporting to the Dominion Bureau of Statistics.

The recent growth of public hospitals is shown in Table 32, which indicates the number and capacity of such hospitals by provinces, the ratio of bed capacity to the adult population, and that of cribs and bassinets to the number of young children, for 1937 and 1944.

For Canada as a whole, between 1937 and 1944, the increase in the number of actual hospital beds as distinct from cribs and bassinets, slightly more than kept pace with the rise in population. This type of accommodation rose considerably in proportion to population in Nova Scotia and Alberta, but fell off appreciably in British Columbia. Alberta and British Columbia retained the highest proportion of hospital beds, Prince Edward Island and New Brunswick having the lowest.

Over the period, the number of cribs and bassinets in Canadian hospitals rose from 10·0 to 11·1 per thousand children under five years of age. New construction, exceeding the relative increase in the number of young children, resulted in large proportionate increases in Nova Scotia and the Prairie Provinces. These were partly offset by a sharp recession in British Columbia, where construction quite failed to balance population increase, and by a smaller drop in Quebec. Alberta hospitals now have relatively the most accommodation for young children, with British Columbia still in second position. The lowest crib and bassinet capacity per thousand children is shown in Quebec and in New Brunswick.

Over half the accommodation in Canadian public hospitals is in those with more than two hundred beds, and less than five per cent in those with less than twenty-five beds. The trend in recent years has been toward larger hospitals, for modern scientific medical care requires facilities and personnel which can only be supplied in such institutions. At the same time, the lack of small hospital facilities in Canada means that people in many rural areas are without adequate medical care.

Small hospitals are relatively most numerous in Alberta and Saskatchewan, where the development of publicly-owned hospitals, through joint action by provin-

TABLE 32.—BED CAPACITY OF CANADIAN PUBLIC HOSPITALS IN RELATION TO POPULATION[1], 1937 AND 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	1937					1944				
	Number of hospitals	Bed Capacity		Beds per 1,000 population[1]		Number of hospitals	Bed Capacity		Beds per 1,000 population[1]	
		Beds	Cribs and bassinets	Beds	Cribs and bassinets		Beds	Cribs and bassinets	Beds	Cribs and bassinets
CANADA	**575**	**43,850**	**10,027**	**4·4**	**10·0**	**593**	**48,825**	**13,030**	**4·5**	**11·1**
Prince Edward Island	4	238	56	2·8	6·1	4	240	75	2·9	8·6
Nova Scotia	27	1,621	320	3·3	6·0	33	2,280	731	4·2	11·3
New Brunswick	18	1,271	289	3·3	6·3	19	1,459	438	3·6	8·3
Quebec	77	11,423	3,111	4·1	9·3	84	13,501	3,264	4·4	8·2
Ontario	161	13,756	2,883	4·1	10·1	155	14,591	4,050	4·0	11·8
Manitoba	40	3,402	680	5·2	11·4	42	3,594	884	5·4	13·3
Saskatchewan	87	3,369	836	4·0	9·3	87	3,419	1,004	4·4	13·1
Alberta	88	3,880	868	5·5	11·8	92	4,609	1,382	6·2	17·2
British Columbia	73	4,890	984	6·9	20·8	77	5,132	1,202	6·0	14.6

[1] Population as estimated by the Dominion Bureau of Statistics. Cribs and bassinets are related to the number of children under five years of age, other bed capacity to the remaining population.

cial and municipal authorities and through intermunicipal co-operation, has led to the extension of hospital facilities to sparsely-populated districts. It is significant that Alberta, which has the largest number of hospital beds in relation to the population in Canada, also has a high proportion of beds in small hospitals.

Table 33 shows bed capacity of Canadian public hospitals in relation to the size of hospital, for the year 1945.

AUTHORITIES ADMINISTERING HOSPITALS

"Public" hospitals in Canada include not only those administered directly by a public authority, but all those which are subsidized out of public funds and admit patients irrespective of financial status, race, religion or colour.

Most Canadian hospitals are administered by religious groups or by lay voluntary boards on a non-profit basis, although in recent years, the municipal hospital, urban and rural, has been increasing in importance in the Canadian hospital system. A number of large urban centres have civic hospitals, while the municipal or "union" hospitals, which have been referred to, are becoming numerous in rural areas, particularly in the Prairie Provinces.

Table 34 shows the distribution of hospitals in Canada by provinces under the various operating groups.

It will be seen from Table 34 that the lay voluntary and religious institutions were evenly balanced in the Maritimes, with municipal hospitals also fairly important. In Quebec religious societies owned most facilities. In Ontario, about half the hospitals were operated by lay voluntary boards, with the rest evenly divided between religious and municipal bodies.

In Manitoba, like the Maritimes, nearly all facilities were managed by lay voluntary or religious groups. Saskatchewan and Alberta showed a large percentage of municipal ownership, most other hospitals being administered by religious organizations. Lay voluntary groups controlled the majority of British Columbia hospitals.

Reliance upon the voluntary hospital system, while it has many advantages, has led to a lack of co-ordinated planning to meet the hospital needs of all the people of Canada. As a result, some communities lack hospital facilities, while in others there may be duplication. Some areas have a surplus of private ward beds, and a shortage of public ward beds. Many rural areas are still without adequate hospital accommodation.

HOSPITAL CARE

Canadian public hospitals provide a comprehensive range of services both for bed-patients and those receiving out-patient care. The former group, which included 1,269,427 patients, received 14,975,802 days care in 1944. This represented 11·8 days per patient, or 1·25 days hospital care per capita of general population.

The average number of patients under care at any particular time was 41,029.

The average length of stay per patient was highest in Quebec, possibly because of the extent of tuberculosis treatment in acute disease hospitals in that province. Hospitalization per capita was highest in the western provinces, especially British Columbia and Alberta.

TABLE 33.—BED CAPACITY OF CANADIAN PUBLIC HOSPITALS[1] BY SIZE OF HOSPITAL, 1945

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

	Total		1-25 Beds		26-50 Beds		51-100 Beds		101-200 Beds		201 Beds and Over	
	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds
CANADA	**591**	**61,108**	**144**	**2,500**	**162**	**5,986**	**119**	**8,441**	**89**	**12,633**	**77**	**31,548**
Prince Edward Island	4	321	1	22	—	—	2	170	1	129	—	—
Nova Scotia	33	2,988	3	46	10	377	11	792	5	721	4	1,052
New Brunswick	18	1,914	2	32	5	209	5	388	5	797	1	488
Quebec	84	15,959	7	159	14	566	15	1,141	22	3,298	26	10,795
Ontario	158	19,618	24	279	39	1,471	33	2,243	36	5,044	26	10,581
Manitoba	41	4,214	9	182	15	573	6	403	5	624	6	2,432
Saskatchewan	86	4,382	44	786	21	699	13	927	4	611	4	1,359
Alberta	89	5,861	28	530	35	1,237	17	1,155	3	415	6	2,524
British Columbia	78	5,851	26	464	23	854	17	1,222	8	994	4	2,317

[1]Excludes Dominion goverment hospitals, private hospitals, tuberculosis sanatoria and mental hospitals.

TABLE 34.—CONTROLLING BODIES OF HOSPITALS[1] FOR ACUTE AND CHRONIC DISEASES IN CANADA, 1945

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics)

—	Voluntary				Municipal[4]		Provincial		Total Public Hospitals		Private Hospitals[5]		Dominion Hospitals		TOTAL All Hospitals	
	Lay[2]		Religious[3]													
	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds	Hospitals	Beds
CANADA	**246**	**20,603**	**218**	**28,250**	**125**	**11,297**	**2**	**958**	**591**	**61,108**	**283**	**4,499**	**63**	**13,535**	**937**	**79,142**
Prince Edward Island	2	199	1	100	1	22	—	—	4	321	—	—	—	—	4	321
Nova Scotia	17	1,072	10	1,216	5	387	1	313	33	2,988	3	38	8	1,331	44	4,357
New Brunswick	7	639	8	725	3	550	—	—	18	1,914	7	159	5	725	30	2,798
Quebec	16	2,971	65	12,670	3	318	—	—	84	15,959	57	1,438	7	1,932	148	19,329
Ontario	98	9,200	35	5,486	25	4,932	—	—	158	19,618	55	953	14	4,829	227	25,400
Manitoba	15	1,686	18	1,974	8	554	—	—	41	4,214	7	119	7	1,870	55	6,203
Saskatchewan	31	757	19	1,637	36	1,988	—	—	86	4,382	91	758	3	347	180	5,487
Alberta	11	477	37	2,382	40	2,357	1	645	89	5,861	27	188	11	1,045	127	7,094
British Columbia	49	3,602	25	2,060	4	189	—	—	78	5,851	36	846	8	1,456	122	8,153

[1] Excludes tuberculosis sanatoria and mental hospitals.
[2] Includes 694 beds in Red Cross hospitals.
[3] Includes 26,133 beds in Roman Catholic hospitals, 2,117 in other religious institutions.
[4] Includes 619 Union Hospital beds in Saskatchewan.
[5] Includes industrial hospitals.

Table 35 indicates the extent of care given to bed-patients in public hospitals in 1944.

In addition to in-patient care, many Canadian hospitals provide out-patient services on a considerable scale.

Comparable statistics for out-patient departments for 1944 as compared with pre-war years are not available. There is no doubt, however, that the volume of out-patient treatment has fallen off substantially over this period. In 1944, 57 out-patient departments in Canadian hospitals reported 1,425,872 patients treated.

General surgical treatments accounted for almost one-sixth of this total with venereal disease, eye, ear, nose and throat, and general medicine following in that order. Together, these four services included well over half the treatments administered.

HOSPITAL REQUIREMENTS

A variety of factors affect the need for hospital accommodation generally and for the particular type of facilities necessary to meet requirements in different parts of the country. The demand for hospital care is influenced by many variables, including the attitude of the public, economic status, the age distribution of the population, the birth and death rate, and the prevalence of disease. In estimating hospital requirements, it is necessary to consider facilities for all types of patients in relation to the single problem of providing adequate accommodation to meet changing needs.

Shortage of accommodation for special types of patients, including the mentally ill, results in pressure upon general hospital facilities. More beds for the chronically ill, for convalescents and for senile patients in institutions adapted to their special needs would not only be better for the patients themselves, but would result in the liberation of many hospital beds for those more acutely ill.

As indicated in Table 31, there were only 18 hospitals with a total bed capacity of 3,602 to give care to the incurable and the chronically ill in all Canada in 1944. With the exception of a few large cities, most communities have no accommodation for such patients.

With respect to convalescent patients, the situation is even worse. There are only 9 convalescent hospitals in Canada, with a total of 737 beds. There are no public convalescent hospitals in Prince Edward Island, Nova Scotia, New Brunswick, Saskatchewan, Alberta, nor in British Columbia although some of these provinces have private nursing homes where convalescent patients are accommodated.

More accommodation is urgently required for senile patients. Discharge of this type of patient from general hospitals is delayed because of the lack of facilities for care in the community. Most existing institutions for old people prefer inmates who can look after themselves; most, too, depend entirely for their support on voluntary contributions.

For patients suffering from contagious diseases, there are only 11 hospitals in all Canada, with a total capacity of 1,500 beds. A number of general hospitals have a few isolation rooms where such patients can be kept, but these are too few in number and frequently lack proper equipment for adequate isolation.

Lack of facilities for such patients is due in part to the fact that intermittent patronage and the special care required make such provision costly; and possibly in part to the fact that responsibility for providing hospital facilities for contagious diseases has generally been placed upon the municipalities.

Availability of Accommodation

The availablity of hospital accommodation is related to geographic and economic factors. The first of these involves the problem of bringing the hospital and the patient together, and the second is the problem of paying the cost of care.

Bringing the Patient and Hospital Facilities Together

Modern methods of communication and transportation together with the development of specialized treatment procedures necessitating care by trained personnel

TABLE 35.—PATIENTS UNDER CARE AND AVERAGE STAY PER PATIENT IN CANADIAN PUBLIC HOSPITALS, 1944

(Source: Institutional Statistics Branch, Dominion Bureau of Statistics)

	Patients under care during year	Number of Patient Days	Average days care per patient	Average Number Patients under care	Patient-days per capita, (total population)
CANADA	1,267,226	14,932,515	11·8	40,911	1·25
Prince Edward Island	11,266	87,737	7·8	240	·96
Nova Scotia	68,964	721,694	10·5	1,977	1·18
New Brunswick	42,796	487,194	11·4	1,335	1·05
Quebec	254,938	3,793,652	14·9	10,394	1·08
Ontario	423,066	4,889,599	11·6	13,396	1·23
Manitoba	93,606	1,007,233	10·8	2,760	1·38
Saskatchewan	109,727	1,081,454	9·9	2,963	1·28
Alberta	130,421	1,300,170	10·0	3,562	1·59
British Columbia	132,442	1,563,782	11·8	4,284	1·68

in well equipped hospitals, have led to a new conception of bringing the patient and the hospital facilities together. This involves the construction of hospitals in districts not adequately served in the terms of their particular needs, the setting up of outposts for emergency and less complicated work, facilitation of the transportation of patients to hospitals through the improvement of roads and the extended use of aeroplanes.

The extension of diagnostic facilities for both rural and urban areas, and the development of nursing programmes are also directly related to the problem of bringing patients promptly to the hospital for care.

Meeting the Cost of Care

Costs of treatment in private hospitals are met wholly through patients' fees. In some of the smaller publicly-owned municipal hospitals, full hospital treatment is provided without direct charge to residents of the municipality, the costs being met out of tax funds. In other municipal hospitals, and in all the voluntary hospitals, patients are charged for service, and those who cannot afford to pay are given care in public wards, costs for their care usually being met by the province and municipality in which they are legally resident. In the case of indigent patients, a means-test is imposed by the hospital, by the responsible municipality, or by both. Out-patient service is usually provided on a means-test basis.

In addition to making per capita per diem grants for the treatment of patients, provincial and municipal governments also subsidize hospitals in a variety of ways, including tax exemptions, direct lump-sum grants, the payment of deficits and the guarantee of debentures.

Apart from capital expenditures, provincial and municipal contributions to operating revenue of Canadian hospitals amounted to almost $1,200,000 in 1944. At the same time, this was less than one-fifth of the total maintenance expenditures, which were met principally by contributions from paying patients. Expenditure of public (acute disease) hospitals in Canada is shown in Table 36, together with an analysis of sources of funds.

FEDERAL ACTIVITIES

Thirty-seven hospitals operated by the Department of Veterans Affairs at the beginning of August 1946, included 10,721 beds for the treatment of acute diseases. There were 7,217 patients in these hospitals and 1,955 other veterans were being given care at the expense of the Department in community general hospitals.

TABLE 36.—EXPENDITURE AND SOURCE OF FUNDS OF GENERAL PUBLIC (ACUTE DISEASE) HOSPITALS[1], 1944

(SOURCE: Institutional Statistics Branch, Dominion Bureau of Statistics, unless otherwise noted)

(thousands of dollars)

—	Total Maintenance Expenditure	Source of Funds						
		Province	Municipalities	Other Grants	Net Earnings from Patients[2]	Total Operating Revenue	Other Special and Capital Revenue[3]	Total Revenue
CANADA	**69,053**	**5,462**	**7,237**	**250**	**48,132**	**61,081**	**7,295**	**68,376**
Prince Edward Island	325	18	4	11	268	301	36	337
Nova Scotia	3,296[4]	302[4]	97	17	2,323[4]	2,739[4]	341	3,080[4]
New Brunswick	1,901	21	163	2	1,613	1,799	124	1,923
Quebec	18,770	1,448[5]	1,868[5]	85	12,054	15,455	3,639	19,094
Ontario	22,283	1,013	2,215	11	16,963	20,202	1,464	21,666
Manitoba	3,781[6]	308[5]	470[6]	55	2,730	3,563[6]	176	3,739[6]
Saskatchewan	4,283	503	891[7]	6	2,686	4,086	164	4,250
Alberta	6,195	745	636	—	3,883	5,264	508	5,772
British Columbia[8]	8,219	1,104	893	63	5,612	7,672	843[3]	8,515

[1] Excludes 22 hospitals (822 beds) which did not file returns in 1944, and hospitals for incurables, but includes expenditures for tuberculosis units in general hospitals. If hospitals not reporting and hospitals for incurables were included, and tuberculosis units excluded, total maintenance expenditure would be increased by approximately 1,042. (See Note 1, Table 38.) Both these factors are of greatest importance in Quebec, where they are roughly equal. The total expenditure for tuberculosis units of general hospitals was approximately 1,650, distributed as follows: Nova Scotia 200, Quebec 1,320, Manitoba 130.

[2] Probably contains some amounts paid by municipal hospital districts.

[3] Includes government grants for capital expenditure and private donations, other than those made by community chests and similar bodies, which are shown as "Other Grants". Donations shown as "Other Special and Capital Revenue" amounted to approximately 3,150 of which 1,300 was contributed services. Provincial grants for capital expenditure were approximately 880, of which approximately 755 was in Quebec and 115 in British Columbia. Municipal grants for capital expenditure were approximately 80, of which 60 was in Ontario.

[4] Including Victoria General Hospital, the provincial expenditure being 130, and earnings from patients (including municipal payments) 287.

[5] After transferring 1,434 from province to municipalities, since the latter pay their share of the cost to the province.

[6] After deducting expenditures for the King Edward (Tuberculosis) Hospital of 130, comprising 20 provincial grants and 110 municipal payments.

[7] After transferring 712 paid by municipalities for patients' fees to "municipalities".

[8] Based on financial reports in the *British Columbia Report on Hospital Statistics*, 1944, adjusted to exclude provincial grants to tuberculosis units in general hospitals.

The Department of National Health and Welfare, on March 31, 1946, maintained four quarantine stations, located at the ports of Halifax, Saint John, Quebec and Victoria, with a total bed capacity of 69. It also operated two small leprosy hospitals in New Brunswick and British Columbia respectively, and two small hospitals in Nova Scotia for mariners only.

During the fiscal year 1945-46, the Department of National Health and Welfare maintained 266 "general hospital" beds in 21 Dominion government hospitals and nursing stations providing hospital care for Indians. The operating expenses for these facilities were approximately $128,400 as compared with $104,200 in 1944-45.

The health insurance proposals made by the federal government at the Dominion-Provincial Conference of 1945 included grants towards the estimated cost of care in general hospitals. These are described, along with the proposed Dominion government loans for hospital construction, in the section on Health Insurance.

PROVINCIAL ACTIVITIES

Hospital legislation and practice has developed along different lines in different parts of the country, so that there is a considerable degree of interprovincial variation with respect to organization and arrangements for hospital care. This is described in the following summary of provincial practice.

Prince Edward Island—There is no Hospital Act in Prince Edward Island, and no per capita per diem payments are made by public authorities. The province, however, gives $6,000 annually to each of the two general hospitals in Charlottetown, and to the hospital in Summerside. The provincial government makes annual grants to three other general hospitals, one receiving $2,000 and the others $1,500 each.

Charlottetown makes annual grants of $1,500 to both of its general hospitals, and Summerside pays $600 annually to the hospital in that city. There are no convalescent hospitals in the province, and no hospitals for communicable diseases. Incurable cases are given care in the Provincial Infirmary associated with the Falconwood Mental Hospital.

Nova Scotia—The provincial government contributes toward the cost of caring for all patients admitted. This aid is given to a hospital on condition that the municipality in which the institution is situated shall contribute at least $500 annually toward maintenance costs. Other conditions for provincial aid include the approval of plans and specifications, regular inspection by provincial hospital authorities, and the appointment by the Governor-in-Council of a representative to the governing board of the hospital.

The provincial grants are made at the rate of 30 cents per patient per diem for the first 5,000 patient days until the total amount to any one hospital equals $1,500. The rate is then reduced to 20 cents per patient per diem for the remainder of that year. These grants are applied to all patients both public and private as well as to babies born in hospitals.

When a patient enters hospital and makes no arrangement to pay, the hospital is permitted under the provision of the Local Hospital Act, to collect from the municipality in which the patient claims settlement $2.00 per patient per day. The municipality may in turn recover the amount so paid from the patient or next of kin if they are able to pay or from the municipality of actual settlement. From December 1, 1946 this $2.00 a day was increased to $3.00 a day.

The Province of Nova Scotia maintains a general hospital in the City of Halifax.

No special provision has been made for the institutional care of the ordinary contagious diseases outside of Halifax where there is a City Infectious Diseases Hospital. There are no convalescent hospitals. This latter type of patient along with those incurably ill may be given care in municipal homes.

New Brunswick—No per diem grants are made for patients in general hospitals in New Brunswick, aid from the province to the various institutions being given in the form of lump sum grants, which amount to some $20,000 annually. Municipalities are responsible for all patients unable to pay for hospital maintenance. Fees for such cases are chargeable at the average per diem cost for the current or immediately preceding year. In addition, a few municipalities make small grants to local hospitals.

There is no convalescent hospital in the province, but care for indigent convalescent patients, and for the incurably ill, may be provided in local institutions for the poor.

Quebec—Inspection of hospitals and administration of grants is under the direction of the Provincial Department of Health. While municipal hospitals exist in Quebec, most institutions are operated by private bodies, usually religious orders. The cost of caring for indigent patients is met through equal contributions by the province, the responsible municipality, and the hospital authority. These grants, made in accordance with the Public Charities Act, are given on a sliding scale for each type of hospital, according to the care provided for patients.

General hospitals receive grants varying from $1.00 to $1.50 per patient per day from both the province and the municipality in which the indigent person is domiciled. These hospitals are paid the highest rate for their respective classes for all hospitalization not exceeding one hundred days, and a lower rate for each additional day.

Convalescent hospitals receive grants of 67 cents a day from both the province and the municipality for the first 50 days for each patient, 50 subsequent days being paid for at 50 cents a day.

Grants for incurables are at a daily rate of 75 cents during medical treatment, 50 cents a day being paid by the province and the municipality for each patient cared for as a chronic case.

For the confinement of indigent unmarried mothers in maternity hospitals, the provincial and municipal authorities each contribute $1.00 per patient per day for 20 days. Children's hospitals and creches receive grants from both governments varying from $1.00 (in the case of special surgical treatment) to 30 cents, while grants to hospitals for infirm children are at the rate of 50 cents a day.

Indigent patients in hospitals for contagious diseases are paid for on the basis of $1.50 a day from both provincial and municipal governments.

Hospitals which specialize receive grants for indigent patients at the rate of $1.50 per day for the first 60 days, $1.00 for the 60 days following, and 67 cents a day for the balance of the patient's stay, equal grants being made in each case by the province and by the responsible municipality.

Ontario—General hospitals, convalescent hospitals and hospitals for incurables are administered in Ontario by voluntary or local public authorities under the general supervision of the Provincial Department of Health.

The province pays 75 cents per diem for the first 60 days' treatment of an indigent patient in a general hospital, and 50 cents daily thereafter. The municipal rate for indigents is fixed by statute at $2.25 a day.

Since January 1946, a new method of determining grants has been applied to the 14 general hospitals located in the medical teaching centres. Under this plan, the province pays a per diem rate for each public ward bed, irrespective of occupancy. The rate varies according to a formula which favours hospitals with a high occupancy rate and a high proportion of public ward accommodation. The maximum daily rate is $1.00 for hospitals affiliated with a medical school, and 75 cents for other hospitals in a medical teaching centre. The extension of this plan to all public general hospitals is contemplated.

Grants for indigent patients in general hospitals from districts without municipal organization are made by the province at the rate of $3.00 per patient per day for 60 days and $2.75 per day thereafter.

In cases of indigency, care of newborn babies in general hospitals is paid for by the province at the rate of 30 cents a day for 14 days, the municipal grant being fixed at 60 cents a day. Cases from unorganized territory are paid for by the province at the rate of 90 cents a day for 14 days.

Grants for indigent patients in convalescent hospitals are made by the province at the rate of 50 cents per day, while municipalities pay $1.50 per patient per day for their residents. The province pays $2.00 for residents of unorganized districts.

Hospitals for the chronically ill receive per patient per diem payments of 50 cents from the province and $1.50 from the municipality responsible.

Manitoba—Hospital grants given through the Hospitals Division of the Manitoba Department of Health and Public Welfare are conditional on a minimum capacity of fifteen beds. Grants are paid by the province at the rate of 50 cents per patient per diem for public ward patients, the municipal grant being set at the average cost of public ward care for the preceding year, provided the sum does not exceed $2 per diem. For newborn babies born in hospitals, the province pays 25 cents a day and municipalities $1.

Municipalities are required, after three weeks' written notice, to pay $2 per patient per diem for the care of indigent incurables and cases unsuitable for hospital treatment.

Saskatchewan—Provincial grants to hospitals in Saskatchewan are made for every patient through the Provincial Health Department. Hospitals are graded, and per diem grants vary from 30 cents to 50 cents per patient.

Municipalities are required to pay $2.50 per diem for indigents admitted at the request of the municipality, or, in cases of emergency, without request.

Provision is also made for payment of grants under the Health Services Act, directly to hospitals or to municipalities responsible for health services. Municipalities are empowered, under the various municipal Acts, to take over, purchase or maintain hospitals, and to arrange for treatment of patients at municipal expense.

The province makes grants and loans for hospital construction purposes.

The Union Hospital Act provides for the joining together of neighbouring municipalities to form a union hospital district for the building, operating and maintaining of a hospital to serve the people of the area included in the district.

A system of hospital care insurance has been introduced in Saskatchewan. This plan, which is to become effective January 1, 1947, is described in the section on Health Insurance.

Alberta—Hospital grants, administered in Alberta under the medical inspector of hospitals in the provincial Department of Health, are paid for all patients at the rate of 45 cents a day for 120 days, certain exceptions being allowed as to length of stay at provincial expense. Two hospitals receive a contract grant of 90 cents per patient per diem for orthopaedic and other long treatment cases.

Muncipalities pay the public ward charge for indigent patients up to a statutory maximum but make no statutory grants for all patients comparable to those made by the province.

A provincial programme of hospital care for maternity cases was instituted in 1944. Patients eligible under the provincial residence requirement are entitled to twelve days hospitalization, including the day of delivery.

British Columbia—Grants, administered by the Provincial Secretary's Department, are made in British Columbia to hospitals complying with the Hospitals Act. Aid to hospitals takes the form of per capita grants based on a graded schedule varying from 70 cents to $1.25 per day.

The grant is paid in respect to all patients, whether indigent or not, in order to create a fund to assist in payment of indigent care, and hospitals receiving such grants may not refuse to admit any patients on account of their indigent circumstances. The municipal grant is set at 70 cents per day for the treatment of all patients who are legally resident in the municipality.

SOURCES:

Brief of the Canadian Hospital Council to the House of Commons Special Committee on Social Security, April 9, 1943.

Department of National Health and Welfare: Indian Health Services Division.

Provincial Departments of Health.

Department of Veterans Affairs: Dr. H. A. Procter, Treatment Branch.

11. PUBLIC MEDICAL CARE

In addition to care provided in public hospitals tax-supported medical care services have been developed in Canada along three distinct lines.

The first group of services are those providing care for certain groups forming sociological units, including members of the armed forces, veterans, Indians and Eskimos, and mariners. These persons are normally self-supporting, but obtain medical care because they belong to one of these particular social groups. All these services are administered by the Dominion government.

The second group of services are those provided for persons financially unable to afford private care. They are provided on the basis of need to persons with small or no resources of their own. While care in public hospitals for the "medically indigent" has generally been available on the basis of actual medical need with payment in relation to the resources of the applicant, other medical care has been restricted. In many parts of the country there is no form of public medical care for needy persons in their own homes, and persons requiring such care are entirely dependent upon charitable agencies or upon the unorganized but common free care provided by private physicians.

In Ontario, British Columbia and Saskatchewan, and in a few large cities in other provinces, arrangements are in effect whereby persons receiving various forms of public assistance obtain medical care at public expense. There is a general lack of organized provision for persons who are not dependent upon the community for other necessities of life, but whose resources are insufficient to meet the cost of medical care. However, in some places where highly developed public assistance programmes are in effect, measures have been taken to extend the coverage of public assistance medical care programmes to include a few borderline cases outside the actual scope of public assistance eligibility. The development of health insurance plans of universal coverage tends to displace public assistance medical services as such by incorporating the covered group within the general scheme. This is usually done by providing that authorities responsible for maintenance shall pay any required registration fee, the remainder of the cost being met for these, as for all other members of the community, out of general taxation. This policy has been regarded as lowest in cost to the community, administratively simple and socially desirable.

The third type of tax-supported medical care services is that which has developed in Western Canada through the municipal doctor plan. In these programmes service is made available to taxpayers and their dependents without regard to financial resources, usually quite without payment at the time of need. Indigent persons also are entitled to care. This medical care programme together with the parallel hospital service forms the basis for the personal health service programmes being developed in the Prairie Provinces. These plans which are to include the entire population, are health insurance programmes in that they represent a pooling of cost to share the risk of having to make payments for medical care, and insure that no person will be without service because of lack of ability to pay. These health plans are discussed in the section on Health Insurance.

DOMINION ACTIVITIES

Members of the armed forces receive complete medical and hospital services without cost to the individual. This programme is administered through the Defence Departments.

The Department of Veterans Affairs is responsible for medical care services to veterans, all of whom are entitled to medical care during the immediate post-discharge period. Pensioners receive free care for disabilities occasioned by war service, and are eligible indefinitely, along with all veterans with meritorious war service outside of Canada, and those receiving war veterans' allowances, for extended medical benefits. These are provided on the basis of a modified means test and include medical and hospital treatment for acute diseases, other than infectious or contagious diseases, venereal disease, and mental illness, alcoholism and drug addiction. Extended treatment for tuberculosis, and for chronic and incurable illness is also excluded. So far, no provision has been made to integrate general medical care for veterans with any health insurance programme developed on the basis of universal coverage.

The Indian Health Services division of the Department of National Health and Welfare carries out a programme of medical care for Indians and Eskimos in conjunction with the general public health and hospital care services provided for these wards of the Dominion. In 1945-46 expenditures for medical care alone amounted to $1,133,029. Thirty full-time and 74 part-time doctors were employed and 89 graduate nurses, in addition to a large number of professional personnel serving on a fee basis.

The Department of National Health and Welfare also has charge of the treatment of sick mariners. The Canada Shipping Act provides for levying tonnage duties on ships arriving at Canadian ports and for gratuitous medical and surgical treatment of sick mariners employed on board and belonging to ships on which such duties have been paid. In 1944-45 there were 18,316 sick mariners treated, of whom 2,599 required hospitalization. Tonnage duties collected during that year amounted to $211,452, while expenditures totalled $303,768.

PROVINCIAL AND LOCAL PROGRAMMES

Ontario—A system of medical care services for recipients of old age pensions, blind pensions, mothers' allowances and unemployment relief has been developed by the provincial government in co-operation with the

Ontario Medical Association. It is based on a modification of the capitation principle, and wholly administered by the Medical Welfare Board appointed by the provincial Medical Association.

The Province pays the Board 56 cents per month in respect of each person in receipt of categorical assistance, except for those in the northern territorial districts, for whom the monthly fee is 71 cents. Municipalities are responsible for half the fee paid for unemployment relief recipients.

Persons covered by the plan may choose their physician from those participating in the programme, and receive standard medical care and drugs free of charge.

Saskatchewan—Medical care in Saskatchewan is extended to recipients of old age and blind pensions, mothers' allowances and to children in care of provincial child welfare agencies.

Benefits include not only standard medical and hospital services and pharmaceuticals, but dental and optical services. Fee schedules are drawn up for each type of service.

The provincial Medical Services Division has charge of administration, and of payment for all types of service. Fees of physicians and surgeons are paid from a special fund set up on the basis of $9.50 per year for each person entitled to benefit.

British Columbia—Since 1931, the British Columbia government has made grants to certain municipalities to aid in providing medical care for relief recipients. These grants are limited to half the total cost of physicians' services and drugs. By 1940, the system had spread to most municipalities with many relief recipients. In 1943 this public medical care programme was broadened and now includes all those receiving public assistance. Local governments make their own arrangements regarding administration and the payment of physicians.

Local programmes—In addition to the programmes of public medical care developed by provincial authorities, a number of municipalities make arrangements for medical care of the indigent. For example, the City of Winnipeg employs a full-time physician to provide medical care to the needy in their own homes.

SOURCES:
British Columbia, Department of Health and Welfare.
Regulations published by the Province of Ontario.
Regulations published by the Province of Saskatchewan.

12. HEALTH INSURANCE

Health Insurance is simply a plan for pooling costs to assure that a person's medical care is not limited by his or her financial resources. When it is operated as a government or state measure it usually implies compulsory payments by or on behalf of the persons in the class or area covered. The payments may be in the form of specified contributions, a special tax, general taxation or a combination of two or all of these forms.

Movements in the direction of modern state health insurance plans appeared towards the middle and latter part of the 19th century in Western and Central Europe where the existing voluntary institutions were used as the basis of organization. These institutions were self-governing mutual benefit societies the membership of which was drawn in varying degrees of coverage from workers in particular occupations or undertakings or from residents of a particular locality.

United Kingdom—A system of compulsory contributory health insurance has been in effect in England since 1911. In 1943 the Report of Sir William Beveridge proposed that the existing scheme be revised and extended to include every person in the United Kingdom. A modified version of his plan was embodied in the 1944 White Paper but never came before the House in concrete form. Following the 1945 election an extended measure was introduced into Parliament and passed in 1946.

The Health Service Act* establishes a unified service for the improvement of physical and mental health. Hospital, specialist and laboratory services are centralized under the Minister of Health. Actual administration of hospital and specialist services is to be carried out by Regional Boards working in conjunction with Boards of Governors of the teaching hospitals. Hospital staffs, including specialists who may participate on a part-time basis, are to be employed by these Boards which determine terms of engagement of staff, subject to central regulation.

Subject to the needs of persons requiring such accommodation on medical grounds, persons wishing private accommodation in hospitals may obtain it by paying the extra cost.

Bacteriological laboratory and blood transfusion services are also to be centrally administered. Provision has been made for research on matters relating to the prevention, diagnosis or treatment of illness or mental defectiveness, to be conducted by the Ministry, subsidized voluntary agencies, Regional Boards or teaching hospitals.

The second aspect of the programme covers personal health services provided by general medical practitioners and dentists, and the supply of drugs and appliances. A system of eye clinics is also projected. These services are to be administered by local Executive Councils, established in the area of each county and county borough. Half the members are to be appointed by local professional groups, one-third by the local government authority in the area, and one-sixth by the Ministry of Health. Counties and county boroughs are required to provide, equip, staff and maintain health centres to provide facilities for the general medical and dental services, for clinics and for health education. Family doctor services are provided on the basis of combined salary and capitation fees.

The third part of the health programme comprises local and domiciliary service to be carried out by local government authorities. This includes such functions as: maternity and child welfare and midwifery; health visiting and home nursing; local mental health services; vaccination and immunization; ambulance service; supplementary after-care measures and domestic help. Appropriate charges may be made in respect of the last two services.

To advise the Minister in the administration of the whole service, a Central Health Service Council, primarily professional in character, is to be established.

The health service is to be financed mainly from the exchequer, assisted by a payment of some £32 millions transferred from the National Insurance Fund, and partly from local rates.

The national exchequer will bear the cost of hospital, specialist and other centrally organized services, the cost of family practitioner services, and those of central administration, as well as half the total cost of local authority services.

These grants to local authorities will be made on a weighted fifty per cent basis, with individual authorities receiving amounts varying from three-eighths to three-fourths of their expenditures, the remainder being met out of the local rates.

The amount to be transferred from the National Insurance Fund to the exchequer to help finance the health service is to be the equivalent of contributions of 10d. weekly from all men over 18 covered by the scheme, 8d. weekly from all women over 18 and 6d. weekly from persons under 18.†

While coverage of the national insurance system is almost universal, and a proportion of each contribution is directed toward the health service, benefits under the latter are not conditional upon any insurance qualification or the proof of having paid contributions.

New Zealand—Under New Zealand's Social Security Act which went into effect on April 1, 1939, coverage is

*This Act applies only to England and Wales. Similiar legislation is planned for Scotland.

†The insurance plan itself provides for unemployment and sickness benefit, maternity benefits, retirement pensions and a range of special services. Flat rate contributions are to be paid by all adults. The worker and his employer will make a joint weekly payment of 8s. 9d. Two ratios are laid down for the sharing of this premium, according as the worker receives a weekly wage of above or below 30s. In the former case, the division is more favourable to the employer. The self-employed man pays a fixed weekly contribution of 6s 1d., the non-employed man 5s. Within these categories, lower rates are paid by women and workers under 18.

general but at the outset health benefits were limited in character. Maternity benefits were provided first and at present medical services, hospital, pharmaceutical and certain supplementary benefits (X-ray, massage, etc.) are provided.

Australia—Plans have been announced in Australia for a national public medical service to provide care for all Australians without reference to financial need. The medical care programme, along with hospital services and pharmaceutical benefits plan, is to be part of the national social security system, financed through the National Welfare Fund. A referendum conducted with the national elections in September 1946 resulted in the federal government being given constitutional authority to undertake this service.

Canada—In Canada the many aspects of health insurance have been subjects of serious study and discussion over a period of at least thirty years by national and regional organizations such as labour groups, agricultural groups, women's organizations (rural and urban), medical associations, health officers and others interested in public welfare. As under the provisions of the British North America Act, health insurance is considered to be primarily a responsibility of the provinces it is perhaps natural that the first active step towards the institution of a government health insurance plan should have been taken by a province.

In 1919 British Columbia appointed a Royal Commission to investigate the subject. Another Royal Commission to study health insurance and maternity benefits was appointed in 1929; as a result of the reports of these Commissions a health insurance Act was passed in 1936 but did not go into effect.

In Alberta as a result of the reports of Committees appointed in 1928 and 1932 a Health Insurance Bill was introduced and passed by the Legislature in 1935 but did not go into effect. In 1946 a new Act was passed in a form similar to that outlined at the Dominion-Provincial Conference of 1945.

Legislation in Saskatchewan as early as 1919 and in Manitoba in 1920 enabled rural municipalities, and to a limited extent the towns and villages, to provide medical care and to spread the cost over the areas in which the service was given. This enabling legislation, commonly called "The Municipal Doctor Plan" was put into effect in a number of rural areas in these provinces. The Manitoba Health Plan introduced in 1945 and the health services plan outlined for Saskatchewan in 1944 and 1946 are both based on the integration of public medical and hospital care with public health services. In Saskatchewan a system of public hospital care insurance will go into effect January 1, 1947.

There has been considerable development in Canada in the provision of prepaid hospital care and ancillary services through group hospital plans. These have been in existence for over thirty years. Most of them are limited as to the amount of services and include conditions as to the length of time during which such services are provided. Some of the plans are purely local in character, while others such as the "Blue Cross" hospital plan cover wide areas. The costs of service under this plan for standard ward care are 50 cents per month for single persons and $1 per month for a family unit, including only children under sixteen.

The extent of coverage varies widely. The director of the Ontario plan stated in October, 1946, that 700,000 people or one-sixth of the population of the province were protected by this form of health insurance. Since its inception in 1941 the plan had paid Ontario hospitals $6,109,000.

The most highly developed insurance medical care programmes in Canada are those organized in connection with the provincial workmen's compensation schemes operating in all provinces except Prince Edward Island. A full range of treatment is provided for the victims of industrial accidents and for those suffering from occupational diseases. Full costs are met by employers through a system of collective liability, contributions being graded according to industrial hazards. Medical care is provided quite without cost to the employee, except in British Columbia, where workers make small contributions to these costs, but not to the cost of pensions.

Medical care expenditures in 1945 totalled almost five and a half million dollars, of which two million was in Ontario, more than one million in British Columbia, and approximately one million in Quebec.

Medical aid only was found to be necessary in 56 per cent of all industrial accidents in Nova Scotia, New Brunswick, Ontario, Manitoba and Saskatchewan. In Ontario, where medical services are most highly developed, more than 61 per cent of all accident cases required medical care only.

Dominion

The question of Health Insurance for the Canadian people has been discussed on a number of occasions in the Parliament of Canada. On March 21, 1928, the House of Commons adopted a motion:

> "That, in the opinion of this House, the Select Standing Committee on Industrial and International Relations be authorized to investigate and report on insurance against unemployment, sickness and invalidity."

On May 1, 1929, this Committee in its second report made the following recommendations:

"(*a*) That with regard to sickness insurance, the Department of Pensions and National Health be requested to initiate a comprehensive survey of the field of public health, with special reference to a national health programme. In this, it is believed that it would be possible to secure the co-operation of the provincial and municipal health departments, as well as the organized profession.

"(*b*) That in the forthcoming census, provision should be made for the securing of the fullest possible data regarding the extent of unemployment and sickness, and that this should be compiled and published at as early a date as possible."

The Dominion Council of Health in May, 1932, passed a resolution urging that the recommendation contained in clause (*a*) be implemented.

On June 6, 1935, the Dominion Government passed the Employment and Social Insurance Act authorizing the appointment of an Employment and Social Insurance Commission for the purpose of assembling information regarding health insurance plans and reporting thereon

and it was authorized to submit to the Governor in Council proposals for co-operation by the Dominion in providing benefits. The Act was submitted to the Supreme Court of Canada and was found to be unconstitutional. This judgment was affirmed by the Privy Council.

In June, 1941, under direction of the Minister of Pensions and National Health a report of deficiencies in the field of public health and medical services in Canada was prepared by the Director of Public Health Services and presented by him to a general meeting of the Dominion Council of Health and representatives of national voluntary health organizations. As a result of these discussions a study of public health and medical services was undertaken with the object of formulating a health insurance plan.

In October, 1941, the Canadian Medical Association formed a Committee on Health Insurance to assist the Director of Public Health Services in the preparation of a tentative draft plan for public health and health insurance.

Advisory Committee on Health Insurance

On February 5, 1942, the Dominion Government by Order in Council authorized the formation of an Advisory Committee on Health Insurance consisting of officials of several Departments of the Government under the chairmanship of the Director of Public Health Services of the Department of Pensions and National Health. The terms of reference given to the Committee were

> "to study all factual data relating to health insurance and report thereon to the Minister of Pensions and National Health".

With the object of surveying the Canadian scene, studying the needs of the country and drawing up a plan incorporating the needs of the people, health insurance committees of organized professional and lay groups were formed. These included the Canadian Medical Association, the Canadian Dental Association, the Canadian Hospital Council, the Canadian Nurses Association, the Catholic Hospital Council of Canada, the Canadian Public Health Association, the Canadian Pharmaceutical Association, the National Council of Women, the Canadian Welfare Council and the Canadian Association of Social Workers, the Trades and Labour Congress of Canada, the Canadian Federation of Agriculture, the Canadian Manufacturers Association and the Canadian Life Insurance Officers Association. The majority of these organizations made direct recommendations approving the principle of health insurance.

The Advisory Committee continued its deliberations which resulted in the preparation of a draft Health Insurance Bill, which was presented to the General Council of the Canadian Medical Association in Ottawa on January 18, 1943, at which time the Council went on record as favouring the principle of health insurance.

Special Committee on Social Security

The report of the Advisory Committee on Health Insurance included a draft Health Insurance Bill and was presented to the Special Committee on Social Security appointed by the House of Commons on March 16, 1943.

This report contains a comprehensive review of the development of health insurance. The outline which follows indicates the nature of the subjects covered in the report and a page reference thereto.

Part II of the Report presents a "Historical Survey" in which Chapter II deals with "The Evolution of the Social Security Idea" under the following sub-headings:

Chapter III of the Report deals with "The Rise of Health Insurance" under the following sub-headings:

Chapter V of the Report deals with the "Growth of the Movement in the United States" under the following sub-headings:

Part III of the Report presents a résumé in Section 1 of the "Voluntary Schemes"—page 81—and in Section 2 of the "Compulsory Schemes" —page 93—in various countries. Complete details are given regarding:

The Committee on Social Security heard 117 witnesses representing 32 groups, including the health insurance committees which had appeared before the Advisory Committee on Health Insurance. All groups expressed themselves generally in favour of the principle of health insurance.

After discussing the draft Bill, the Special Committee on Social Security made the following report to the House of Commons on July 23, 1943:

> "The Committee approves of the general principles of health insurance set forth in the Health Insurance Bill respecting public health, health insurance, the prevention of disease and other matters related thereto.
>
> "The Committee recommends:—
>
> 1. That before the Bill is approved in detail or amended and finally reported, full information regarding its provisions be made available to all the provinces.

2. That to provide this information, officials of the various Government departments concerned be instructed to visit the various provinces and to give full details of the proposed legislation to the provincial authorities.
3. That, if possible, before the next session of Parliament a conference of representatives of the Governments of the various provinces and the Dominion be held to discuss certain complex problems involved, especially financial and constitutional questions.
4. That in the light of all the information meanwhile obtained, study of the Bill be continued by a Committee of the House and by the Advisory Committee on Health Insurance."

The Advisory Committee on Health Insurance continued its studies as recommended, in the course of which the financial suggestions contained in the first draft Bill were revised by a sub-Committee on Health Insurance Finance. Data relating to the proposed plan of health insurance was prepared for the provinces but members of the Advisory Committee did not visit the provinces as recommended because it was considered that the financial proposals were not sufficiently complete for presentation to the provinces.

When the Advisory Committee had completed its studies a new draft Bill was placed in the hands of the Minister of Pensions and National Health and referred by him to the Special Committee on Social Security. The Bill was discussed and amended and reported to the House on July 29, 1944.

The report presenting the amended draft Bill to Parliament by the Special Committee on Social Security was as follows:

"After a long and careful study of the subject of Health Insurance, which included the taking of evidence and the receiving of briefs from all interested organizations, your Committee presents herewith a draft Health Insurance Bill submitted by the Department of Pensions and National Health which, with minor amendments, it has approved with the exception of Clause 3 and Schedule 1, dealing with financial arrangements between the Dominion Government and Provincial Governments.

"Your Committee recommends that this Bill be referred to the Dominion-Provincial Conference for consideration of its general principles as expressed in its various clauses, and of the financial arrangements involved.

"Your Committee heard evidence and received briefs on other phases of social security, but they were unable to give detailed or adequate study to the whole subject, which involves also intricate financial and constitutional problems. Your Committee recommends that when possible, consideration be given to the extension of unemployment insurance, sickness cash benefits, funeral benefits and other measures which will help to provide protection against old age, illness and economic misfortune, and to the establishment of greater co-ordination, and the elimination of overlapping or duplication of existing measures of social welfare under Dominion and Provincial Governments."

Conference of Ministers of Health

While the meetings of the Special Committee on Social Security were taking place, a conference of Provincial Ministers and Deputy Ministers of Health was held at Ottawa on May 10-12, 1944, to discuss the draft Bill. This was the second meeting of Provincial Ministers and their Deputies with the Minister of Pensions and National Health. The first meeting was held in September, 1942, to discuss the first health insurance proposals. Those in attendance at the second meeting approved the principle of health insurance. Doubt was expressed by some of the Ministers regarding the ability of their provinces to apply all of the benefits of the Bill at one time and also the ability of the people and provincial authorities to contribute the amounts indicated in the Bill.

Some doubt was cast upon the estimate of cost of the individual services as prepared by the Advisory Committee on Health Insurance, and a sub-Committee was formed to discuss the subject. In the main, the sub-Committee was in agreement with the findings of the Advisory Committee on Health Insurance. Subsequently, the subject of the estimated cost of dentistry, which had been questioned as being too high, was referred to the Canadian Dental Association for consideration. The Canadian Dental Association expressed the opinion that the amount allotted to dentistry was not excessive.

The discussions of the Provincial Ministers of Health and their Deputies were reported to the Special Committee on Social Security, and it was suggested by that Committee that as certain of the matters were related to finance they should be left for discussion at the Dominion-Provincial Conference.

At the 1944 meeting the provincial representatives insisted on the need for flexibility in any national plan. It was their opinion that it should be introduced in several stages and for separate areas.

The draft Bill as reported by the Special Committee on Social Security of the House of Commons on July 27, 1944, together with submissions expressing the opinions of the professional and lay groups regarding Health Insurance, are to be found in full detail in the Minutes of Proceedings and Evidence of the Special Committee on Social Security. The Bill gives in detail a sample organization under which a provincially-administered Dominion-sponsored plan of health insurance might be operated.

The following list sets forth the organizations and departments presenting evidence to the Social Security Committee in 1943 and 1944 together with the page reference to the Minutes of Proceedings and Evidence.

LIST OF SUBMISSIONS TO SOCIAL SECURITY COMMITTEE, 1943 AND 1944

SPECIAL COMMITTEE ON SOCIAL SECURITY—1943

Date	No. of Proceedings and Evidence	Organization or Department Presenting Evidence	Evidence Page
March 16	1	Department of Pensions and National Health:	
		Minister	1–40
March 19	2	Department of Insurance: Chief Actuary	46 (67–79)
		Department of Pensions and National Health:	
		Director of Public Health Services	46–61
March 23	3	Department of Insurance: Chief Actuary	83–98
		Department of Pensions and National Health:	
		Director of Public Health Services	99–106
March 30	4	Dominion Council of Health: Provincial Deputy Ministers of Health	107–129
		Department of Insurance: Chief Actuary	119–128
April 6	5	Canadian Medical Association	133–160
April 9	6	Canadian Tuberculosis Association	161–168
			(189–195)
		Canadian Hospital Council	170–187
April 13	7	Canadian Nurses Association and allied organizations	197–215
May 7	8	Canadian Medical Association: Department of Cancer Control	217–231
		Canadian Pharmaceutical Association	231–240
May 11	9	Canadian Dental Association	241–259
		Canadian Medical Association: Industrial Hygiene Department	259–265
May 14	10	Department of Pensions and National Health:	
		Division of Child and Maternal Hygiene (and special witnesses on maternal and child health)	267–281
		Canadian Federation of Agriculture	281–314
May 18	11	Special witnesses on mental hygiene	315–330
			(337-339)
		Trades and Labour Congress of Canada	330–336
May 21	12	Canadian Public Health Association	341–363
May 25	13	Sir William Beveridge	365–379
May 27	14	Special witnesses on physical fitness	381–406
May 28	15	National Council of Women	407–408
		La Fédération des Femmes Canadiennes Françaises	408–409
		The Catholic Women's League	409–410
		Department of Pensions and National Health:	
		Division of Venereal Disease Control	410–416 (435–438)
		(Special witnesses on venereal disease)	416–434 (506–508)
June 1	16	Christian Scientists of Canada	439–456
		Canadian Association of Optometrists	457–475
June 4	17	Dominion Council of Chiropractors	479–499
		Drugless Practitioners of Ontario	499–505
		Human Adjustment Institute	(509–510)
June 8	18	Canadian Life Insurance Officers Association	512–532
June 10	19	Canadian Federation of Agriculture	533–554
		Medical Liberty League	554–568
June 11	20	Catholic Hospitals of Canada	569–587
June 15	21	Canadian Osteopathic Association	589–612
June 16	22	National Research Council: Medical Research Committee	613–618
June 18	23	Dominion Council of Health: Committee on Civilian Blind	619–627
		Canadian National Institute for the Blind	627–644
			(644–652)
June 22	24	Chiropodists of the Dominion Canadian Medical Association	653–660
		(Supplementary brief)	661–668
June 29	25	Victorian Order of Nurses	669–679
		Department of Pensions and National Health:	
		Solicitor	679–688
July 6	26	Canadian Federation of the Blind	689–699
		Canadian Legion, B.E.S.L.	699–714
		(and Imperial Division, B.E.S.L.)	

Date	No. of Proceedings and Evidence	Organization or Department Presenting Evidence	Evidence Page
Feb. 24	1	Department of Pensions and National Health:	
March 1		Minister	1–12
		Director, Public Health Services	13–22
March 9	2	Department of Pensions and National Health:	
		Minister	23–28
		Director, Public Health Services	28–36
		Sub-Committee on Health Insurance Finance	28–47
March 16	3	Department of Pensions and National Health:	
		Director, Public Health Services	53–69
		Sub-committee on Health Insurance Finance	68
		Department of Pensions and National Health:	
		Departmental Solicitor	58
		Department of Insurance: Chief Actuary	60–62
			70–72
March 22	4	Department of Pensions and National Health:	
		Director, Public Health Service	75–86
		Sub-Committee on Health Insurance Finance	87–102
		Department of Insurance: Chief Actuary	97–98
March 30	5	Department of Pensions and National Health:	
		Director, Public Health Services	107–123
		Sub-committee on Health Insurance Finance	108–114
		Department of Pensions and National Health:	
		Departmental Solicitor	131
		Dominion Veterinary Medical Council	(134–140)
April 20	6	Department of Pensions and National Health:	
		Director, Public Health Services	143–159
		Sub-committee on Health Insurance Finance	157
		Christian Scientists of Canada	(165–170)
		Dominion Council of Chiropractors	(170–176)
		Special Appendix on Doctors' Fees	(177–183)
April 26	7	Christian Science Organization	195–198
		Department of Pensions and National Health:	
		Director, Public Health Services	193–194, 203
		Departmental Solicitor	199–200
		Department of Insurance: Chief Actuary	202
		Canadian Congress of Labour	(209–218)
		Canadian Association of Social Workers	(219–224)
May 2	8	Department of Pensions and National Health:	
		Director, Public Health Services	225–235
May 4	9	Consideration of Draft Bill: No evidence heard.	
May 9	—	" " "	
May 16	—	" " "	
May 18	—	State Hospital and Medical League, Regina, Sask.	(237–274)
May 23	—	Consideration of Draft Bill: No evidence heard.	
May 30	—	Provincial Ministers and Deputy Ministers of Health	(275–277)
June 1	—	Consideration of Draft Bill: No evidence heard.	
June 22	10	Special Witness:	
		Executive Director, Canadian Welfare Council	280–299
			(299–301)
July 4	11	Department of Pensions and National Health:	
		Director, Public Health Services	302
		Departmental Solicitor	302
		Department of Insurance: Chief Actuary	302
		Special Witness:	
		Executive Director, Canadian Welfare Council	(303-316)
July 13	12	Special Witness:	
July 18	—	Principal and Vice-Chancellor, McGill University	320-334
July 27	13	Third Report and Draft Health Insurance Bill: No evidence heard.	

(Evidence included in appendices shown in parentheses.)

SUMMARY OF RECOMMENDATIONS REGARDING HEALTH INSURANCE MADE BY ORGANIZATIONS TO THE SOCIAL SECURITY COMMITTEE, 1943 AND 1944

	Principle of Health Insurance					Administration						Finance						Coverage			Benefits		
	In Favour		Opposed			National			Provincial						Contributions								
		With important qualifications		With important qualifications	No opinion expressed	Department	Independent Commission	Advisory Body	Department	Independent Commission	Advisory Body	Federal Grants-in-Aid	National	Provincial	Compulsory	Voluntary	Taxation	Universal	Limited	Special recommendation	Medical Care	Cash benefits	Special recommendation
Dominion Council of Health	×								×		×	×			×						×		
Canadian Medical Association	×					×		×		×	×	×			×					×	×		
Canadian Tuberculosis Association	×											×								×			
Canadian Hospital Council	×							×	O	O		×			×			×					×
Canadian Nurses Association and allied organizations	×																						×
Canadian Pharmaceutical Association					×																		×
Canadian Dental Association		×						×		×										×			×
Canadian Federation of Agriculture	×						×			×			×				×	×			×		
Trades and Labour Congress	×						×			×		×						×			×	×	
Canadian Public Health Association	×					×			O	O		×						×					
National Council of Women	×														×				×		×		
La Fédération des Femmes Canadiennes Françaises	×											×			×						×		
The Catholic Women's League	×											×			×						×		
Christian Scientists of Canada				×																			
Canadian Association of Optometrists		×																					×
Dominion Council of Chiropractors		×																					×
Drugless Practitioners of Ontario		×																					×
Human Adjustment Institute	×																				×		
Canadian Life Insurance Officers Association	×								O	O		×	×		×						×		
Medical Liberty League			×																				
Catholic Hospitals of Canada		×								×		×			×				×				×
Canadian Osteopathic Association		×																					
La Confédération des Travailleurs Catholiques du Canada		×																					×
Chiropodists of the Dominion		×																					
Victorian Order of Nurses	×														×					×	×		
Canadian Legion and Imperial Division, B.E.S.L.	×														×		×	×			×	×	
Canadian Congress of Labour	×														×		×	×			×	×	
Canadian Association of Social Workers	×					×		×	×		×	×			×			×			×	×	
State Hospital and Medical League	×											×					×	×			×		×

O indicates qualified support or alternative proposals.

Recommendations made to the Social Security Committee in 1943 and 1944 are summarized in the diagram on p. 71, the most striking feature of which is the almost unanimous support given to the principle of Health Insurance by organizations presenting briefs and evidence.

Only one organization was quite opposed to Health Insurance, and another group requested exemption of its members on religious grounds.

Among those organizations bringing forward recommendations relating to administration, there was wide agreement as to the disirability of control resting with the provinces. Most of these groups favoured administration through independent, non-political commissions, a small minority only preferring to have administrative responsibility rest with Provincial Departments of Health. These groups advocated the organization, in each province, of representative boards to act in an advisory capacity only.

It was suggested by some that the Federal Government should be responsible for co-ordination and the establishment of standards.

Comparatively few groups made suggestions respecting financial organization. Some expressed approval of the principles of grants-in-aid from the Federal Government, and of compulsory contributions. Preference for finance through taxation rather than direct insurance contributions was expressed by a few organizations.

Support was given generally to the principle of universal coverage, although a number of groups favoured an income limit or made special recommendations.

Most organizations presenting evidence assumed that medical care benefits were implied in the scheme, explicit support being given solely to this aspect of insurance by a few groups. Cash sickness benefits were recommended specifically by three organizations. Most groups appeared before the Committee to make special recommendations respecting benefits.

1945 Health Insurance Proposals

The proposal made by the federal government at the Dominion-Provincial Conference in August, 1945, was designed simply to put provincial governments in a position to develop and administer a comprehensive health insurance programme to be introduced by progressive stages.

The proposed federal contributions towards this outlay were:

(1) A basic grant of one-fifth of the *estimated* cost of each service; and

(2) One-half the additional *actual* cost incurred by each provincial government in providing each benefit, provided that the total federal contribution did not exceed 60 per cent of the cost of each service or a maximum of $12.96 per person when the complete programme was in operation.

In order to get the plan launched, federal aid for the first three years would be limited to the amounts estimated. These would be altered, after each three years, to conform with the average cost of each benefit.

Within the prescribed stages the provinces could in all cases determine the sequence and method of introducing specific benefits. For example, a province might decide to provide nursing services in certain rural areas. The federal government would then contribute in the agreed ratio to the cost of the service, for all people in the area served. This arrangement would allow each province to institute the benefits for which it felt the most pressing need.

The annual cost of the entire scheme, once fully implemented, would be approximately $250,000,000, with the federal government contributing an estimated amount of $150,000,000, and the provinces $100,000,000. It was part of the proposals that each province should provide for a registration fee, the amount of which they would themselves determine. It was felt that such a fee would form a natural part of the necessary registration procedure. Otherwise, the method of financing was left to the discretion of the provinces.

An integral part of the entire scheme were the proposed planning and organization grants. These were to be made by the federal government immediately following the conclusion of an agreement with the province concerned to enable the provinces to establish staffs to study and report on local requirements in the field of medical services generally. Each province was to receive $5,000, plus 5 cents per capita (according to the 1941 census), no province to receive a total of less than $15,000. The distribution by provinces is indicated in the Introduction.

In the course of the next few months, the proposals were given further study by the Interdepartmental Committee on Health Insurance, and various questions raised by the provincial officials were considered. Two major changes were made as a result of these discussions.

In the first place, laboratory or diagnostic services which had been included among services to be introduced in the later stages of the health insurance plan, were transferred to the first stage, replacing visiting nursing services, which were grouped in the later stages with other nursing services. Several of the provinces had considered that laboratory or diagnostic services should properly be developed in connection with general practitioner and hospital care benefits, since laboratory tests made by a general practitioner would often determine whether hospitalization was essential. It was also felt that provision of such facilities would attract more doctors to rural areas.

The second change involved revision in the cost estimates for hospital care and general practitioner services. It was repeatedly argued that the original allowance of $3.60 per capita for hospital costs was low, while the $6 first allotted for general practitioner expenses was rather excessive. In the revised proposals, therefore, the latter was reduced to $5, with the allowance for hospital care being raised to $4.60 per capita.

It had been originally hoped to introduce the First Stage of the scheme in two years, but in view of the objections raised this part of the proposal was changed to read: "a provincial government entering the plan would agree to furnish general practitioner services, hospital care, and diagnostic services, within a stated period after entering upon the plan."

The current federal health insurance proposal, and the estimated federal contribution, are as shown in the following table.

BASIS OF FEDERAL CONTRIBUTION FOR HEALTH INSURANCE

Service	Estimated Cost Per Capita	Basic Dominion Per Capita Grant[1]	Maximum Additional Dominion Per Capita Grant[2]	Estimated Total Dominion Contribution
	$	$	$	$000
First Stage				
General practitioner service	5.00	1.00	2.00	34,470
Hospital care	4.60	0.92	1.84	31,710
Diagnostic services	0.60	0.12	0.24	4,136
Total—first stage	*10.20*	*2.04*	*4.08*	*70,316*
Later Stages				
Other medical services (consultant, specialist, surgical)	3.50	0.70	1.40	24,129
Nursing services	1.75	0.35	0.70	12,064
Dental care	3.60	0.72	1.44	24,818
Pharmaceutical	2.55	0.51	1.02	17,579
Total—later stages	*11.40*	*2.28*	*4.56*	*78,590*
Total—all services	**21.60**	**4.32**	**8.64**	**148,906**

[1]One-fiifth of the estimated cost of each service.
[2]Based on one-half the actual cost of each service, up to 60 per cent, or a maximum of $12.96 per person.

In the Dominion Proposals outlined at the Dominion-Provincial Conference in August, 1945, it was recognized that the provision of complete health insurance services would require a considerable extension in hospital facilities throughout the country. Much of this expansion would be required even for the first stage specified. It was also recognized that this expansion would be desirable quite aside from health insurance in order to provide the proper facilities for treatment and research.

To make a hospital extension programme less burdensome to the provincial governments and to local communities, it was proposed that the federal government should provide loans to the provincial governments entering health insurance agreements, and through provincial governments to municipalities and other organizations, for necessary expansion of hospital facilities, at a rate of interest equal to or only slightly above the cost of such loans to the Dominion. Interest and amortization would be payable out of the hospital care benefit under the Health Insurance Grant, or out of the Tuberculosis Grant or the Mental Health Grant, as the case might be.

Resolutions of National Organizations

Many resolutions have been passed supporting Health Insurance, among them the following:

At the 31st Annual Meeting, Canadian Public Health Association, held in Toronto, June, 1942:

"Whereas there is urgent need in Canada for the more adequate provision of general medical, dental and nursing services,

"And experience in Great Britain and other countries has demonstrated the value of a system of compulsory contributory health insurance,

"And this association believes that in any health insurance programme, adequate provision for preventive service is essential,

"Be it resolved that this association endorses the principle of national health insurance and urges that the provision of preventive services should form an essential part of this programme."

At the General Council of the Canadian Medical Association, held in Ottawa, January 18-19, 1943:

"Whereas the objects of the Canadian Medical Association are:

1. The promotion of health and the prevention of disease;
2. The improvement of health services;
3. The performance of such other lawful things as are incidental or conducive to the welfare of the public;

"Whereas the Canadian Medical Association is keenly conscious of the desirability of providing adequate health services to all the people of Canada;

"Whereas the Canadian Medical Association has for many years been studying plans for the securing of such health services;

"Therefore be it resolved that:

1. The Canadian Medical Association approves the adoption of the principle of health insurance;
2. The Canadian Medical Association favours a plan of health insurance which will secure the development and provision of the highest standard of health services, preventive and curative, if such plan be fair both to the insured and to all those rendering the services."

At the 47th meeting of the Dominion Council of Health, held in Ottawa, May 28-29, 1945:

"Whereas the Dominion Council of Health has expressed on numerous occasions its conviction that the provision of nation-wide health insurance is essential if adequate medical, dental and hospital care is to be available to all citizens in Canada, and

"Whereas the Council is gratified to learn from the Honourable the Minister of Health and Welfare that the introduction of health insurance is planned and that a policy of grants-in-aid to the provinces has been approved for the purpose of providing assistance needed in the supply of adequate local health services in the control of tuberculosis, venereal diseases, in the prevention and treatment of mental illness, in the training of essential public health personnel, and in the furtherance of medical research, particularly as related to public health; and

"Whereas these and other measures proposed give the Council great encouragement in their belief that the implementing of the proposals will advance greatly the health and welfare of all the people of Canada;

"Therefore be it resolved that the Dominion Council of Health, assembled at Ottawa on May 28-29, 1945, express to the Honourable the Minister of National Health and Welfare its appreciation of the broad public health programme which he has presented to the Council with its objective of making the Canadian people the healthiest in the world."

HEALTH INSURANCE IN THE PROVINCES

British Columbia

The Royal Commission appointed in 1919 recommended the adoption of Health Insurance and in March, 1928, as the result of a resolution, a Committee of the Legislative Assembly was appointed to enquire into the workings of systems of Health Insurance and Maternity Benefits. A Royal Commission on State Health Insurance and Maternity Benefits was appointed by the Provincial Government in April, 1929. This commission published two reports, which strongly favoured the adoption of Health Insurance. These Reports were the basis of a Health Insurance Bill which was drafted for presentation to the Legislature in 1934, but was withheld pending further study.

On March 31, 1936, the Legislature passed a Health Insurance Act which was to have gone into effect on January 1, 1937. This legislation applied to employees with a limited wage; it did not include indigents and the benefits were limited. All the machinery had been set up for the collection of the funds but, chiefly through the opposition of the medical profession and some of the hospital group, the legislation was suspended at the last minute. The opposition is stated to have been based on the failure of the Bill to cover indigents. It was felt that the financial burden of full population coverage was too great for the Province to assume, and that the Dominion should contribute to the scheme.

The Act was contributory and compulsory for all employees whose incomes were less than $1,800 per annum. Agricultural employees, Christian Scientists and members of certain industrial health care plans in existence prior to 1936 were exempt.

The plan included mandatory and permissive benefits, the mandatory being medical practitioner service, hospital care (for not more than ten weeks), necessary drugs and laboratory services; and the permissive, such additional medical services as the fund might permit. The insured had the choice of doctor.

The costs were to be borne by the employer and the employee, while the funds were to be centrally controlled and administered by a Commission.

Alberta

The Alberta Health Insurance Act, which was passed in March, 1946, but which had not come into force through proclamation by October of that year, is intended to provide the basis for developing a system of health insurance districts to provide services for all the people of the province. It repeals previous health insurance legislation, originally passed in 1935, which had not been implemented.

The scheme is to be organized under the Minister of Health, with a Director of Health Insurance as the chief administrative official.

Benefits to be provided under the Act include the prevention of disease and the application of all necessary diagnostic and curative procedures. Specific benefits to be made available by progressive stages include: medical, surgical and obstetrical benefits; dental benefit; pharmaceutical benefit; hospital benefit; and nursing benefit.

Coverage includes all adults who fulfil residence requirements and have paid the prescribed registration fee, their dependents, and public dependents for whom the responsible municipalities pay registration fees.

Persons receiving benefits under the Tuberculosis Act or the Workmen's Compensation Act are not entitled to health insurance benefits.

The Minister is to appoint an advisory board and is given power to fix the registration fee, to make agreements with persons or corporations for the provision of services, and to enter into agreements with the Government of Canada respecting the use of any health services grants which may be made to the province.

The Minister has a wide range of additional powers in connection with the establishment and administration of the system. He is authorized to provide referees to deal with disputes, and to establish procedures for appeals from these decisions.

Health insurance districts are to be established by the Director, subject to ratification by sixty per cent of those voting on the scheme and in each district adults fulfilling the residence requirement prescribed by the Act are entitled to vote. Proposed extension of benefits also requires ratification. Provision is made for disestablishment before a vote is taken, or afterwards provided that 25 per cent of the voters petition for a new poll, and 60 per cent of those voting favour such action.

All registration fees are collected by the municipality and paid to the province, a separate account being maintained for each district. The registration fee is to be uniform throughout the province, the maximum being fixed at ten dollars annually. Expenditures with respect to a health district are to be paid by the Provincial Treasurer out of the account for that district and out of grants made by the Government of Canada and by the province itself. Costs of administration are to be paid by the province.

No reference is made in the Act to the incorporation of the provincial maternity hospitalization system within the general scheme. However, when the

proposed system of obstetrical and hospital benefits becomes operative throughout the province existing arrangements presumably will be superseded.

Saskatchewan

An integrated programme of community and personal health services administered through a system of regional units operating under centralized direction was proposed for Saskatchewan in the survey conducted by Dr. Henry Sigerist in 1944. The first steps toward implementing these proposals were taken during the same year when the Health Services Planning Commission was established by the same legislation which provided for the establishment of health regions. Under this Health Services Act, provision was also made for the programme of medical and hospital services for socially dependent groups. The first phase of a provincial health insurance system has also been initiated with the introduction of a programme of free hospitalization, becoming effective at the beginning of 1947.

The Health Services Planning Commission consists of technical experts in the various fields relating to health problems. It is charged with the task of preparing plans for providing all types of health services and facilities. It acts as an advisory and consultative body to local regions wishing to provide services for their residents.

The Commission also functions as an administrative body. It administers grants to health regions and municipalities and makes recommendations regarding hospital areas, and capital grants to hospitals. It must approve of by-laws and contracts for all types of municipal schemes.

The Commission may administer any act or part of any act assigned to it. It will administer the provincial hospitalization scheme.

The general health services plan projected under the Health Services Acts of 1944 and 1946 and regulations authorized by them includes the system of full-time public health regions, with other health services organized on the same geographic basis, and local medical care services co-ordinated with both phases of the regional programme.

The Health Regions, which form the basis for the administration of the generalized health services plan, are established by regulation of the Minister. A vote may be taken, and regulations establishing districts during 1945 and 1946 provided that any plan would not go into effect if ten municipalities affected were to reject it within 60 days after notice had been given. Regional Health Boards are established by regulation and are composed of the medical health officer and one member from each municipality in the region, named by the municipal council. Regional technical committees are being established to advise the regional board on matters concerned with medical services, dental services and nursing services, respectively.

After health regions have been established the boundaries may be altered or the regions disestablished at the discretion of the Minister.

At August 1, 1946, three health regions had been established, one of which carried out only the basic public health services. The other two had undertaken activities in the field of personal health service.

Regional Boards provide for one or more of the following services:

(a) The planning of hospital and diagnostic facilities for the region.

(b) Free hospitalization for residents of the region.

(c) Medical, surgical and other health services not provided through local agencies.

Regulations under the Health Services Act provide that the regional services, other than the public health services, shall be financed according to recommendations made in accordance with provincial regulation by the regional health board. The provincial government contributes by making grants or loans for capital expenditure on building or equipping hospitals, giving medical care grants for local health services and by meeting fifty per cent of the cost of diagnostic and specialist services, dental care and other approved health services.

According to the Health Services Act, costs other than those covered by provincial grants may be met either through a general tax, with the proportion to be borne by each local governing unit determined by the Local Government Board, or through a personal tax. In either case the local governing authority pays the taxes it collects to the regional board. In the case of the personal tax, local authorities may make payment on behalf of indigent persons for whom they are responsible.

Medical care will continue to be given through local agencies, and the existing municipal doctor schemes are to be integrated within the larger system. Encouragement is being given to the extension of this system of providing general practitioner services, and to its improvement through increasing the size of the local medical care unit so that a number of physicians may be employed and patients have the advantage of group practice. At the same time, these locally-provided medical care services will be supplemented by specialist and other services administered through the regional unit. Provision is made for supplying health services to non-residents on the basis of voluntary payments.

Local medical care grants are paid by the province on the basis of a flat grant of 25 cents per capita per year to each area with an approved scheme, and equalization grants directed toward the improvement of services in newer and poorer communities. Equalization grants are paid on the following basis:

Per Capita Assessment	Equalization Grant Per Capita Per Annum
Under $299	$2.00
$300—$399	1.70
$400—$499	1.40
$500—$599	1.10
$600—$699	0.80
$700—$799	0.50
$800—$899	0.20
$900 and over	—

These grants were authorized by regulation June 30, 1945, and were payable from July 1 of that year for schemes approved by the following October. Grants to other areas are effective from the date of the commencement of an approved scheme.

Conditions for the approval of medical care plans include: the use of approved contracts, whether payment is made by salary, capitation fee, or a fee-for-service plan; a programme of preventive services; no charges (except certain deterrent fees) for general medical care, minor surgery and obstetrics; and the payment of a minimum salary to physicians engaged on that basis.

Schemes which do not meet with approval but in the opinion of the Minister are deserving of grants may receive a proportion of the full grant.

Local medical care services may be financed through general taxation, by a personal tax, or by a combination of the two. All persons over 21 and self-supporting persons under that age are liable for the personal tax where it is imposed. Temporary residents are required to pay, a minimum tax for such persons being set at $2.

The amount of the personal tax for local and regional services is limited to $60 for one family.

Tax exemptions are provided for groups of persons receiving medical and hospital care at the expense of the provincial or Dominion government.

Hospital Care Insurance.—The first phase in the development of province-wide health insurance is the hospital care insurance programme.

Every person who has resided in Saskatchewan for six months or more is to be eligible for free hospitalization anywhere in the province when this programme becomes effective on January 1, 1947.

All those over 16 are required to register for the service.

Persons over 21 and self-supporting persons below that age will be required to pay an annual personal health tax of $5. Parents will be liable for taxes for their dependent children, no family being required to pay more than $30 annually.

Taxes, which were levied from October 1, 1946, are paid to the local municipality, and turned over to the Saskatchewan Hospitalization Fund. It is anticipated that this tax will yield between 3·5 and 4 million dollars. The provincial treasury will contribute the remainder of the cost of the service, which it is estimated will total between 4 and 5 million dollars annually.

Public ward care will be provided, along with services such as X-ray, laboratory, physiotherapy and maternity care. Patients wishing to have semi-private or private ward care will be required to pay the difference.

Taxes levied on indigent persons are to be paid by the agency of government, provincial or municipal, responsible for their maintenance.

In announcing the introduction of the hospital care plan, the Acting Chairman of the Health Services Planning Commission stated that if the Dominion-Provincial health plans were implemented, the per capita hospital tax would be lowered, probably from $5 to $2, since the federal share in the cost of approved services was to be sixty per cent.

Manitoba

The health plan being developed in Manitoba is directed first toward the prevention of disease and second toward making modern medical skill and services available to all the people in the province. The Manitoba plan involves four related programmes: health units, diagnostic facilities, medical care and hospital care.

Health units organized to carry out the task of prevention have been described in the section on General Public Health. This programme is fundamental to the whole Manitoba Health Plan, and is the first service being put into effect.

The second feature of the Manitoba plan is the provision of diagnostic facilities on a province-wide basis, so that all medical practitioners may have the advantages of adequate X-ray and laboratory services. Except for a small service charge, these services are to be provided free to patients.

The province is divided into four diagnostic areas made up of units coinciding with the local health units. Extensive facilities are being made available at central points in each area, and technical personnel from these centres will visit and inspect diagnostic services provided in the various units. Personnel administration is also centralized within each of the four main diagnostic areas.

Capital costs for equipment, estimated at $300,000, are being assumed by the province, which also pays 33 cents out of an estimated total operating cost of 50 cents per person per year. Municipalities are responsible for the remaining cost, but revenue accruing to the province from service charges may be used to pay any additional cost over the estimated total. The province administers the scheme, charging back to the municipalities their share of the cost of maintaining facilities. Any municipality in a health unit area may come into the plan by passing a resolution to that effect. One of the three diagnostic areas outside the City of Winnipeg is coming into operation January 1, 1947.

The third aspect of the Manitoba Health plan relates to the provision of curative medicine. It is essentially an extension of the existing municipal doctor plan, widening the methods whereby municipalities may pay in advance for medical care, and introducing the principle of provincial grants for this type of service. Payment may be made by salary, capitation fee or on a fee-for-service principle. If a municipality enters fully and co-operatively into the disease prevention programme by contributing to a local health unit and diagnostic services unit, the province contributes to the cost of curative medicine in the municipality by making a grant of 50 cents per person per year (one-sixth of the estimated total cost). This grant is subject to the condition that medical services be paid for in advance. Normal initial salary for municipal doctors in rural Manitoba in 1946 was $4,200. Four new municipal doctors were reported in October, 1946, as engaged under this legislation.

Municipal funds to finance the medical care service, as well as the municipalities' share of the health unit and diagnostic service costs, may be raised by a personal health levy or by an annual property tax. For medical care services, the minimum property tax is fixed at four dollars annually, and provision is made for flat-rate taxation in rural areas.

The fourth phase of the Manitoba plan is concerned with the provision of hospital accommodation and control. A Hospital Council advisory to the Minister has been established, with responsibility for planning hospital districts and areas and for supervision of hospitals, including definite standards of building, equipment, accounting and service.

The province is divided into areas and their constituent districts for the purpose of hospital construction, operation and maintenance. With respect to each district, the Minister prepares a plan setting forth the proposed organization and financing and submits it to the municipalities concerned for approval before regulations are passed establishing the district. If the plan is rejected by the councils, the district may be established on petition of ten per cent of the resident ratepayers.

The local hospital board, appointed by the municipalities of the district, submits to the Minister a scheme for the establishment of hospital facilities and for the method of finance. The board is required to consult with the minister during the preparation of the plan, and the minister to assist with technical advice and with the provision of standard plans. Final approval of all plans by the minister is necessary before construction of facilities is proceeded with.

Other than the provision of diagnostic equipment by the Province, the capital costs of building and equipping hospitals are to be borne by the local area. Where a hospital is built or operated as a municipal institution, the immediate area where the hospital is located pays a higher percentage of capital and operation costs than the rest of the area. Hospital taxes, distinct from those for other health services, are based on equalized assessed values in included areas, and are subject to established maxima.

Administration of hospital facilities within each district is placed in the hands of a local hospital board, appointed by the municipalities. The legislation encourages municipalities to provide hospital services but it does not prevent any board from making arrangements with any religious order or any other group to provide such services.

By October, 1946, votes had been taken, the plan approved, and construction of hospital facilities begun in three Districts. One of these had raised all the necessary funds locally. Votes were to be taken in five more districts during November, 1946, and plans were being considered in eleven other areas, with a view to early balloting on the question.

The whole health plan is being administered under the provincial Department of Health and Public Welfare. An advisory Commission has been appointed, the eleven members including representation from the provincial medical association, municipalities, and the provincial university. Members, who serve without remuneration and are appointed for statutory terms of office, have wide powers including the responsibility for approving all regulations made under the Act.

Provision is made for training technical personnel through a system of grants, bursaries and scholarships to increase the number and to improve the education of medical practitioners, technicians, public health nurses and sanitary inspectors. Research is also to be encouraged.

The Minister of Health and Public Welfare stated, when introducing the plan in 1945, that it envisaged the gradual systematic extension of adequate health services throughout the province. It was designed with a view to integration in a federal national health insurance system. The scheme stressed particularly the preventive aspect of medicine, and sought to provide urgently needed services in the rural areas at the most moderate possible cost. Its most notable feature was decentralization and flexibility, along with a comprehensive coverage of the entire health field.

Ontario

The possibility of developing a health insurance system for Ontario was brought to public attention as early as 1920, when the Ontario Medical Association appointed a committee to make a study of the problem. However, it was not until 1931 that the Committee submitted a report which reviewed the question of health insurance. The Medical Association has continued to give its attention to this question as well as to that of providing medical care services for public dependents.

At the same time, Ontario has seen a considerable development in industrial and voluntary schemes for prepaid medical care.

A number of industries in the province provide medical care in part or in whole to their employees, but there is no uniformity in the type of service provided nor in the methods of financing the schemes. For instance, the employees of the Hollinger Consolidated Gold Mines Ltd., at Timmins have an association organized to spread the cost of medical care. This scheme was drafted by the local medical society and came into effect in June, 1937. The plan was favoured by over 90 per cent of the employees and with their dependents covers a normal population of about 9,500.

During recent years there has been a great increase in the coverage of prepaid medical care plans. The Associated Medical Services, organized in 1937 with headquarters in Toronto, is the largest Canadian organization of this type. Its plan provides for the participation of any qualified medical practitioner. Any person under 55 years of age may apply for membership and if accepted qualifies to receive certain benefits covering medical care, hospital care, medicines and specialized treatment. Membership costs $2 per month, with the following rates for dependents: $1.75 per month for the first; $1.50 for the second; $1.25 for the third and $1 per month for each additional dependent. The schedule of fees paid to physicians is 100 per cent of the minimum schedule of fees of the Ontario Medical Association.

Municipal Health Services.—The first step toward public health insurance in Ontario was taken in 1944 when the provincial government passed "The Municipal Health Services Act". It provides for local medical care programmes administered by a central Municipal Health Services Board.

The Board may make agreements with municipalities respecting health plans and with medical, hospital or other associations for the actual provision of services to the municipality. Funds are to be collected by the local government through general taxation or a personal

tax, and turned over in full to the Municipal Health Services Board for disbursement. Any municipal council may appoint an advisory committee to assist and advise it in carrying out its responsibilities under the Act.

Upon the establishment of a health services plan including hospital care, the local municipality will cease to impose county levies for hospital care of indigent county residents.

Provincial grants are provided for in the Act, and the Lieutenant-Governor-in-Council has power to make regulations covering these grants as well as the establishment of plans, the type of services, maximum services to be rendered, the exemption of public dependents and of those covered by group medical or hospital plans, and the reduction or cancellation of taxes in cases of extreme poverty.

Municipal plans may be terminated at the pleasure of the Lieutenant-Governor-in-Council, or by vote in the municipality after they have been in effect for three years.

No medical care programmes had been organized under this Act up to October, 1946.

Quebec

The Quebec Medical Association appointed a committee for the study of health insurance which in its report to the annual meeting in September, 1932, advocated a system of compulsory health insurance somewhat along the lines of the French system.

In 1933 the Quebec Social Insurance Commission in a report to the Minister of Labour recommended "that recourse be had to the subsidized optional regime before the obligatory system" because it was easy to apply it to the existing mutual benefit insurance societies.

In 1943 the Legislative Assembly passed an "Act to constitute a Health Insurance Commission". The Commission was directed to study the whole problem of health insurance and to suggest a plan to meet the situation but no report was ever published and the legislation was repealed in 1945.

Maritime Provinces

No action has been taken by the Maritime Provinces respecting health insurance, yet in Nova Scotia is to be found the oldest scheme of health insurance on the continent. The employees of the Dominion Steel and Coal Company in Cape Breton (Glace Bay District) have a system whereby the workers and their dependents receive medical care and cash sickness benefits. All together the normal population covered is between 30,000 and 35,000 and each employee (employees number between 6,000 and 7,000) pays 95 cents per week regardless of the amount of his wages. This is deducted from wages by the company and paid into a fund from which the medical bills and sick benefits are paid.

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