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DEPARTMENT OF NATIONAL HEALTH AND WELFARE

ANNUAL REPORT

for the fiscal year ending March 31

1952





THE DEPARTMENT OF

NATIONAL HEALTH AND WELFARE

ANNUAL REPORT

FOR THE FISCAL YEAR ENDED MARCH 31

1952

Edmond Cloutier, C.M.G., O.A., D.S.P., Printer to the Queen's Most Excellent Majesty Ottawa, 1952

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To His Excellency the Right Honourable Vincent Massey, C.H., Governor-General and Commander-in-Chief of Canada.

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to present to Your Excellency the Annual Report of the Department of National Health and Welfare for the fiscal year ended March 31, 1952.

Respectfully Submitted,

PAUL MARTIN,
Minister of National Health and Welfare.

OTTAWA, April 1, 1952.

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CONTENTS

		PAGE
Dep	outy Ministers' Report	7
	HEALTH BRANCH	
I.	INTRODUCTION	
	Health Branch Administration	9
	Dominion Council of Health	9
	International Health Activities	10
	Health in Canada	10
II.	ASSISTANCE AND PLANNING SERVICES	13
77700	National Health Program	13
	Federal Aid to Hospital Construction	14
	Services for Children	15
	Cancer Control	16
	Tuberculosis Control	16
	Mental Illness	17
	Venereal Disease Control	18
	Arthritis and Rheumatism	19
	Training of Health Workers	19
	Blindness Control	20
	Child and Maternal Health	21
	Dental Health	23
	Epidemiology	25
	Hospital Design	28
	Industrial Health	29
	Mental Health	30
	Nutrition	32
	Public Health Education	33
	Public Health Laboratory Services	34
	Public Health Research	46
	Surveys and Planning	46
	Canadian Sickness Survey	46
	National Health Survey	47
	Health Insurance Studies	47
	Rehabilitation of Disabled Persons	48
III.	HOSPITAL AND MEDICAL SERVICES	49
	Indian Health Services	49
	Leprosy	53
	Sick Mariners Services	53
IV.	EXAMINATION SERVICES.	55
	Civil Aviation Medicine	55
	Civil Service Health	56
	Immigration Medical Services	59
	Quarantine	60
v.	INSPECTION AND ENFORCEMENT SERVICES	62
	Food and Drugs	62
	Narcotic Control	70
	Public Health Engineering	72

WELFARE BRANCH

I.	INTRODUCTION Welfare Branch Administration	PAGE 75
II.	FAMILY ALLOWANCES.	77
	Costs of Administration	77
	Staff	77 78
	Overpayments	79
	Birth Verification	80
	School Attendance and Employment for Wages. Separation Allowances, Navy, Army and Air Force	80 80
	Prosecutions.	81
	Transfers of Accounts between Provinces	81 82
III	OLD AGE SECURITY.	83
111.	Historical Review	83
	Staff	84
	Accommodation and Equipment Eligibility Requirements of Old Age Security Legislation	85 85
	Proof of age	86
	Residence	86
	Administration of Pension	87 87
	Estates of Deceased Pensioners	88
	Indians	88 88
	Costs of Administration	89
IV.	OLD AGE PENSIONS	90
	Changes in Pension Scheme.	90
	Operation of Old Age Pensions Act Concluded	90 91
v.	PHYSICAL FITNESS.	93
	Administration	93
	National Council on Physical Fitness	95
	CIVIL DEFENCE	
	Purpose	97
	Purpose Federal Responsibilities	97
	Purpose	
	Purpose	97 98 99 100
	Purpose	97 98 99 100 100
	Purpose	97 98 99 100
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment	97 98 99 100 100 100 102 103
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning	97 98 99 100 100 100 102 103 104
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications	97 98 99 100 100 102 103 104 104 105
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation	97 98 99 100 100 102 103 104 104 105
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization	97 98 99 100 100 102 103 104 104 105 105
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States	97 98 99 100 100 102 103 104 105 105 106 106
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services	97 98 99 100 100 102 103 104 104 105 105 106
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom	97 98 99 100 100 102 103 104 105 105 106 106
AD	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH	97 98 99 100 100 102 103 104 105 105 106 106
ADM	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division	97 98 99 100 100 102 103 104 105 105 106 107 108
ADN	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division	97 98 99 100 100 102 103 104 105 105 106 107 108
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division	97 98 99 100 100 102 103 104 105 105 106 107 108
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division Library Personnel Division	97 98 99 100 100 102 103 104 105 105 106 107 108
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division Legal Division Library Personnel Division Purchasing and Supply Division.	97 98 99 100 100 102 103 104 104 105 106 106 107 108
	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division Legal Division Library Personnel Division Purchasing and Supply Division Research Division	97 98 99 100 100 102 103 104 105 105 106 107 108 109 114 114 115 116 117
IND	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division Legal Division Purchasing and Supply Division Research	97 98 99 100 100 102 103 104 105 105 106 107 108 109 114 114 115 116 117
IND TAI DIR	Purpose Federal Responsibilities Organization Federal Provincial Municipal Federal Progress during the Fiscal Year 1951–52 Training Supplies and Equipment Health Planning Welfare Planning Warning and Communications Transportation Animal Health Emergency Organization Information Services Co-operation with the United States Co-operation with the United Kingdom ADMINISTRATION BRANCH MINISTRATIVE SERVICES Departmental Secretary's Division Information Services Division Legal Division Legal Division Library Personnel Division Purchasing and Supply Division Research Division	97 98 99 100 100 102 103 104 105 106 107 108 109 114 114 115 116 117 121 162 163

To the Honourable Paul Martin, Q.C., M.P., LL.D., Minister of National Health and Welfare, Ottawa.

SIR:

The year under review was one of generally increased activity for the department. Three developments are worthy of special note: the widening area of achievement under the National Health Program; the completion of the transfer of the federal responsibility for civil defence to this department; the inauguration on January 1, 1952, of the new program for Old Age Security.

Under the National Health Program, federal grants for hospital construction and health services were taken up by the provinces at an accelerated rate. Expenditures under this program totalled more than \$24,300,000, or 28 per cent more than in the previous year. Provincial health surveys, financed by these grants, approached completion; and the National Sickness Survey, also financed under this program, was successfully carried out in co-operation with the provinces and the Dominion Bureau of Statistics. These two searching reviews of health needs in Canada and of the facilities and services available to meet them provide a firm base for future planning.

In part because of increased federal health activity and because of the imaginative and intensified efforts of members of the provincial health departments, professional health groups and voluntary agencies, the health of the Canadian people continued to improve. The rapid advances made in recent years indicate that Canada's health standards, already high, can be brought to levels as high as any in the world.

In taking over civil defence from the Department of National Defence, in February 1951, the department was confronted with a new range of responsibilities. Previously its participation in civil defence was limited to activities in the health and welfare fields, in which continued progress was made during the year with the effective and public-spirited collaboration of many citizens and voluntary organizations.

The year was one of marked progress in civil defence planning and training to prepare Canadians to cope with disaster. In its role as guiding and co-ordinating agency, the federal division was supported by a steadily developing network of provincial and local civil defence organizations. The federal program expanded notably during the year: 1,300 key organizers and instructors were trained; a national warning system was begun and 200 sirens distributed; federal grants encouraged the standardization of fire-fighting equipment; training manuals were prepared and distributed in large quantities; several hundred thousand dollars worth of training equipment was distributed free to the provinces; and arrangements for mutual aid were initiated with the United States.

The outstanding development of this fiscal year was the inauguration, with the co-operation of the provinces, of the new program for Old Age Security. Under this program, assistance was made available to those in need aged 65 to 69, and a universal pension was provided for Canadians aged 70 and over. The Old Age Pensions Act of 1927 was superseded during 1951 by three new Acts of Parliament: the Blind Persons Act, Old Age Assistance Act and Old Age Security Act.

The administrative responsibility for the new federal pension threw a tremendous burden on the department's staff and facilities. By the end of the fiscal year, 643,013 pensioners were being paid under the Old Age Security Act, administered entirely by the department. For reasons of economy and efficient control, no new administrative machinery was created to handle this vast problem. Instead, the extra work was absorbed by the Family Allowances Division. Through good planning and the wholehearted participation of the members of this division, with a comparatively small addition of staff, the new program was quickly brought into effective operation.

The same emphasis on staff economy seen in this addition holds true for the entire department. While administering the expenditure of \$498,900,000, its staff ranked 12th among federal departments, with approximately 75 per cent serving outside Ottawa. We take this opportunity to commend the members of the Department on the loyal and effective way in which they carried on their duties during the year under review.

Respectfully Submitted,

G. D. W. CAMERON,
Deputy Minister of National Health
and Welfare (Health)

G. F. DAVIDSON,
Deputy Minister of National Health
and Welfare (Welfare)

OTTAWA, April 1, 1952.

HEALTH BRANCH

1. INTRODUCTION

Administration

Scope of the activities of the Health Branch was broadened this year to take in responsibilities relating to the health aspects of Civil Defence. While the basic organization of the Branch was not altered materially, it was necessary to augment and reorient some services, particularly those dealing directly with civil defence health planning and organization, and with professional training designed to strengthen disaster medical services.

The Health Branch continued to carry on functions arising from responsibility for implementing federal health provisions, as well as to work with and through provincial, municipal and voluntary health organizations in Canada and also to co-operate with agencies active in the field of world health.

There are four Directorates in the Health Branch: Food and Drugs, administering the Food and Drugs Act and Proprietary or Patent Medicines Act; Health Insurance Studies, directing application of grants provided under the National Health Program, as well as carrying on a continuing health insurance planning assessment; Health Services, with 14 divisions active in many health fields, assisting and advising local authorities; and Indian Health Services, providing preventive services and medical and hospital care for Indians and Eskimos.

The Health Services Directorate contains the following Divisions: Blindness Control, Child and Maternal Health, Civil Aviation Medicine, Civil Service Health, Dental Health, Epidemiology, Hospital Design, Industrial Health, Laboratory of Hygiene, Mental Health, Narcotic Control, Nutrition, Public Health Engineering and Quarantine, Immigration Medical and Sick Mariners Services.

Dominion Council of Health

Consisting of the chief health officers of each of the provincial Departments of Health as well as representatives of certain major segments of the population, the Dominion Council of Health is the principal advisory body to the Minister on health matters.

During the year the Council met twice and considered certain problems in connection with the administration of the National Health Program and the planning of Civil Defence Health Services, as well as questions of current concern to public health authorities, such as the control of the sale of horsemeat and the protection of workers exposed to ionizing radiations in certain industrial processes using radio-isotopes, etc.

Co-operation with the Provinces in the planning and development of health services generally and particularly in fostering the effective and full utilization of funds available under the National Health Program was further achieved through meetings of the following advisory committees held during the year: Canadian Council on Nutrition, Technical Advisory Committee on Public Health Laboratory Services, and the Research Sub-Committee of the Advisory Committee on Mental Health.

International Health Activities

The Health Branch of the Department discharges certain responsibilities resulting from bilateral or multilateral international agreements. The enforcement of regulations governing the harvesting and handling of shellfish for export to the United States, under the International Shellfish Agreement; and participation in studies of boundary waters and atmospheric pollution, at the request of the International Joint Commission, are examples of such international activities. In addition, the Department has responsibility to the United Nations and its specialized agencies, as for the control of narcotic drugs and the custody and distribution of biological standards.

Canada is a member of the World Health Organization and the Department nominates the Canadian delegation to the annual World Health Assembly. The Fourth Assembly was held in May 1951 and the Canadian delegation was headed by Dr. E. A. McCusker, M.P., Parliamentary Assistant to the Minister.

Other members of the Delegation were: Dr. Pierre Gauthier, M.P. for Portneuf, Dr. F. D. Mott, Deputy Minister of Health for the province of Saskatchewan, Miss E. MacCallum and Mr. N. H. Berlis, of the Department of External Affairs, with Dr. J. B. Bundock, of this Department's Immigration Medical Service at The Hague.

At that Assembly, new International Sanitary regulations were adopted which are intended to replace a number of previously existing sanitary conventions to which Canada was a signatory.

A commentary on the work of the World Health Organization and other United Nations specialized agencies, as well as of Canada's participation in them, may be found in the report "Canada and the United Nations", published by the Department of External Affairs.

During the year the Department was also called upon to arrange programs of training in various health fields for individuals awarded Fellowships by the World Health Organization, the United Nations and the Colombo Plan.

A large number of invitations for Canada to be represented at international scientific congresses in various specialized branches of medicine were referred to the Department through the Department of External Affairs and, while very few were attended by departmental officials, every effort was made to advise those members of the profession who might be interested in participating.

Health in Canada

At the present time the best indices for measuring the state of heath or sickness in the nation include physicians' reports on death certificates and communicable diseases notifications which are received by Provincial Health Departments and are passed on to the Dominion Bureau of Statistics to be tabulated and compiled. These, along with such other data as hospital statistics and industrial absenteeism reports, provide an indication of the health of the nation.

Various communicable diseases such as diphtheria and typhoid fever have been on the decline since the turn of the century whereas the incidence of chronic diseases, including heart diseases and cancer, have been increasing over the same period. Much of the increase in these diseases has been attributed to the aging population and the improvement of diagnostic methods. The current mechanical era, with its industrial hazards and increased use of transportation facilities, has also added to the amount of disabilities and deaths

through accidents. In recognition of the changing health picture in Canada, health officers at different levels of government are gearing their health programs to meet the problems of the day.

Developments in 1951-52 (fiscal year)

Canada's Sickness Survey was completed in the fall of 1951. This survey is described in Part II of this report. The data collected during this survey are expected to provide considerable new information concerning the amount of sickness and disability which occurred during the survey year and also about permanent physical disabilities. Facts concerning the cost of payments for medical care for a period of one year will also be important for health insurance planning.

Although no serious epidemic occurred in Canada during the past year, a number of diseases showed an increased incidence. Influenza, which spread to Canada from the United Kingdom and which caused widespread disability throughout most of this country in February and March 1951, created considerable concern. More than 10 times as much influenza was reported in 1951 as in 1950, the rate per 100,000 population being 338 for the former year and 30 for the latter.

Poliomyelitis also showed a marked increase in 1951 over 1950 with a rate of 18·3 per 100,000 while the 1950 rate was 6·6. The highest incidence occurred in Prince Edward Island, Nova Scotia and Ontario.

The incidence of other communicable diseases varied considerably, some continued to have minor fluctuations during the year, while others continued to decrease still further. For example, the whooping cough case rate declined 27 per cent from the previous year, and diphtheria made a further decline of 40 per cent for the same period. Smallpox has not been reported in Canada for the past five years, and no deaths have occurred since 1939.

Tuberculosis, which is still one of the leading causes of death in the ages 15 to 39, has also shown a further improvement in case incidence with a decline of 10 per cent for the same interval. There are also indications that the tuberculosis death rate for 1951 will reach an all-time low. The rate for 1950 was 25.9 per 100,000. The United States' rate for the same year was 23. The venereal diseases, which have shown a rapid decline since penicillin was introduced in 1946, also had a 15 per cent reduction in the case incidence in 1950-51.

In the Annual Report for last year the most recent vital statistics and other indices of the health status of the Canadian people were reviewed. However, as there is little significant change from one year to the next in such figures, this year they are presented in terms of comparison with other countries. Fortunately the basic data are now being collected and published by the United Nations in the series of Demographic Year Books.

Birth Rate

For some years Canada has had a relatively high crude birth rate. In 1948, for example, it was tenth highest of 34 countries. Canada's rate of 27·0 births per 1,000 population contrasts with Costa Rica's high of 41·3 and the rates for the United States and the United Kingdom, with 24·2 and 17·9 births per thousand population respectively.

Although there is considerable variation among the provinces, all are comparatively high; the range is from 24.0 for British Columbia to 34.4 for New Brunswick. There has been a general decline since the postwar peak and the preliminary figures for 1950 show Canada's crude birth rate to be 26.6.

Gross and Net Reproduction Rates

This picture of Canada's relatively high birth rate is supported in convincing fashion by the more specific gross and net reproduction rates, which measure capacity to maintain the population in the absence of large-scale immigration. Thus Canada has higher reproduction rates than the countries of Western Europe, the United Kingdom and Australia. Its rate is approximated, but not exceeded, by those of Finland, Portugal and New Zealand.

Expectation of Life

Another index of the health of the people is "expectation of life at birth". For Canada in 1947 the mortality experience indicated a life expectancy at birth of 65·18 years for males and 69·05 years for females. This compares reasonably well with other advanced countries, but Canada is somewhat behind Australia, New Zealand and the Netherlands.

Crude Death Rate

Canada continues to have a relatively low and declining death rate, a reflection, in part, of a young population.

Infant and Maternal Mortality

While Canada has made notable progress in reducing the infant mortality in recent years, the rate is still higher than in those countries with which it is usually compared. In 1950 Canada's rate was 41 infant deaths per thousand live births, while for the United Kingdom and Denmark the rate was about 31 and in other Scandinavian countries, the United States, Australia and New Zealand the infant mortality rate was under 30. In maternal mortality too, Canada has shared in the general decline of rates.

Causes of Death

In Canada and in the countries of North Western Europe, the Antipodes, the United Kingdom and the United States, the major causes of death are quite consistently, diseases of the heart, cancer and other malignant tumors, and intracranial lesions of vascular origin. The ten leading causes also generally include congenital malformations, nephritis, violent and accidental deaths, pneumonia and bronchitis, tuberculosis of the respiratory system and diabetes mellitus. As might be expected, the same order of causes prevails in the United States and Canada, but there is some disparity in the order in other countries. Nephritis and diabetes seem disproportionately important in Canada and the United States.

II. ASSISTANCE AND PLANNING SERVICES

In addition to its statutory health responsibilities, which are reviewed in this Report according to their functions as Hospital and Medical, Examination or Inspection and Enforcement Services, the Department extends assistance and guidance to provincial and other agencies engaged in the conservation and improvement of health.

This phase of the Department's work has assumed increasing importance in recent years and, during the past fiscal year, brought the Department into direct working liaison with practically every aspect of health activity, both official and voluntary, in Canada.

The Department continued to contribute in large measure to development of many health fields, including research related to socio-economic aspects of health matters, and supplemented its consultative and laboratory assistance by providing provinces and municipalities with informational aids for their use in enlisting public co-operation in attaining health objectives.

Many of the current activities of the assistance and planning services relate, in large measure, to the application of federal funds made available to local authorities under the National Health Program.

NATIONAL HEALTH PROGRAM

Purpose of Program

The National Health Program was announced on May 14, 1948. At that time it was evident that, although high standards had been attained in public health in Canada, there were many gaps in the services provided. It was also evident that the corrective measures which the provincial and local governments wished to take in overcoming these deficiencies could require substantial support from the Federal Government.

This Program made federal grants available to the provinces, under certain conditions, to strengthen and extend public health services and facilities. The Program has four basic purposes:

- (a) to assist the provinces in surveying their health facilities and services;
- (b) to assume part of the cost of new hospital construction over a period of years;
- (c) to make annual grants to improve and strengthen provincial services in particular health fields;
- (d) to lay sound foundations for health insurance.

In the four years the Program has been in operation, it has been possible to plan the expenditure of over \$66,700,000 of the federal health grants made available to the provinces. Substantial progress has been made with the assistance of these grants and also because of the considerably increased expenditures on health by provincial and local governments. With this concerted effort health services in Canada are now reaching new levels.

When the National Health Program was brought into effect information about existing services and those required, as well as about the extent of ill-health and disability in Canada, was either non-existent or far from complete. There were many needs; for example, hospital accommodation was clearly inadequate; there was a serious shortage of qualified health workers, and in many instances health services suffered because of the lack of equipment.

Summary of Achievements

- 1. With funds provided out of the Health Grants, surveys of existing health facilities and services have been carried out. Most of the provincial health surveys have been received and the great body of factual information contained in these reports is now being collated.
- 2. To supplement the health surveys a national sickness survey of a sample group of 10,000 Canadian families has recently been carried out. This is the most comprehensive and searching study yet made of the extent and economic implications of illness in Canada. It will take some months to complete the analysis of the great mass of information gathered.
- 3. Federal hospital construction grants have helped materially in defraying costs of construction of 433 hospitals and hospital additions, which will provide over 36,400 additional beds, thus nearing the five-year objective of 40,000 beds.
- 4. Federal funds under the various grants have made possible the training of over 3,300 additional health workers. During the fiscal year 1951-52, 3,048 full-time and 1,108 part-time health workers were employed on provincial and local health staffs with the aid of the grant funds.
- 5. Provincial and municipal health facilities and services were also strengthened by the purchase of additional technical equipment and the extension of both preventive and treatment services. These and other new developments under the federal program have enabled the provinces to intensify their campaigns against major health hazards such as cancer, tuberculosis, mental illness, venereal disease, arthritis and rheumatism, crippling conditions in children, and others.
- 6. There has been a significant increase in health research in Canada because of the additional federal funds provided.

Federal Aid to Hospital Construction

In the past four years, federal aid has been approved for 433 new hospitals or hospital additions with 36,400 additional beds. Of these 36,400 beds, almost 20,700 have been provided in general hospitals; 4,000 are for chronic and convalescent patients; 8,000 will serve mental patients and over 3,700 beds are for tuberculosis patients. Moreover, assistance was given towards the construction of 1,158 nurses' beds. Assistance approved to the provinces for the construction of hospitals, nurses' residences and health centres since the inception of the National Health Program now totals \$39,223,600.

The federal Hospital Construction Grant provides that for all approved projects, under certain conditions, \$1,000 is available for each bed for active treatment and \$1,500 for each bed for mental, tuberculosis, chronic and convalescent patients. By making a larger grant available for the latter type of hospital accommodation, the building of accommodation for long-stay patients is encouraged, thus releasing more active treatment beds for their proper purpose.

Federal grants are also given towards the construction of community health centres which combine hospital accommodation with facilities for preventive and treatment services. At the beginning of the fiscal year 1951-52 the hospital construction grant became applicable to the construction of

nurses' residences. This step, besides providing financial assistance to hospitals which construct accommodation for their nurses, had as its aim to improve the living conditions of nurses, which, in turn, should contribute to the alleviation of the shortage of nursing personnel. Assistance on the basis of \$500 per approved bed is available to hospitals under certain conditions.

Another extension of the Hospital Construction Grant applies to the construction of combined laboratories—i.e.—a laboratory contained in or connected with a hospital and providing public health laboratory services in conjunction with diagnostic laboratory services to both out-patients and in-patients of the hospital. Such a laboratory can qualify for a grant on the basis of \$1,000 per 300 square feet, up to a maximum of 25,000 square feet. This provision applies only to laboratories commenced after April 1, 1951. Hospitals are thus being encouraged to combine their laboratories so as to make the best possible use of pathologists and other highly-trained staff and also to economize on equipment costs.

In order to raise the level of hospital accommodation the Hospital Design Division of the Department has established special standards. These standards have tended to lessen overcrowding in hospitals and to reduce the number of large wards that were commonplace in older institutions.

In addition to assistance toward the cost of construction of hospital buildings, provision is also being made toward the purchase of technical and scientific equipment under several grants such as those for crippled children, mental health, tuberculosis control, general public health, and cancer control, in their respective programs. Through these grants hospitals may receive funds for the purchase of certain technical equipment provided that the hospitals concerned do not derive any revenue from the equipment purchased. Provision of apparatus for the admission chest X-ray program and various clinics in hospitals can be quoted as examples of this type of assistance.

Federal grants have already added large numbers of nurses, nurses' aides, laboratory technicians, hospital accountants and other health workers to hospital staffs and have made possible additional training for hospital personnel in many fields.

The trend in recent years has been to make hospitals the centres of community services. This movement has been encouraged by provincial grants and is further reinforced by the federal government's contribution.

Services for Children

With the aid of the various grants, health services for children have been greatly strengthened. As part of a preventive program, there has been a decided increase in child and maternal care, in pre-school and school medical and dental programs, in mental health services for children, and in facilities for the care of crippled children.

All provinces had programs for child and maternal health developed before the inauguration of the National Health Program, but federal aid has made possible a considerable expansion in facilities and services. Child and maternal health programs now concern themselves with the health of the mother before and after confinement and the health care of the child at every stage of development.

Federal assistance has made possible the establishment of special school health services in every province. Audiometric test services, the medical examination of pre-school and school children and preventive dental services are some of the extensions of school health services made possible by the grant funds.

The federal health grants are enabling the provinces to make modern diagnostic, evaluation and treatment facilities more readily available to children crippled by accident, disease or inherited defect. The lack of trained physiotherapists, which has been one of the most serious difficulties in caring for the needs of crippled children, is slowly being alleviated. Every province is intensifying its program for the prevention and correction of crippling conditions in children, and for the rehabilitation and training of crippled children.

With federal assistance, the expansion of child guidance work in Canada has been marked in the past four years. In addition to providing funds for the establishment and operation of an increased number of mental health clinics, preventive activities have been further supported by providing psychological services in schools. Teacher-psychologists are giving valuable assistance to various clinics and schools throughout the country.

Cancer Control

Under the National Health Program, a grant of approximately three and a half million dollars annually is made available to the provinces on a matching basis in order to combat cancer. The purpose of the grant is to assist all the provinces in improving their efforts in the cancer control field. The ultimate objective of the program is to ensure that no person suffering from cancer will be denied the assistance required for the detection, diagnosis and treatment of the disease, regardless of where he might live or of his ability to pay.

In the early stages of the program the provinces generally were unable to take full advantage of the federal funds available. With each passing year, the utilization of the moneys available for this essential purpose has steadily increased until, in the past fiscal year, projects were submitted by the provinces calling for the expenditure of more than 65 per cent of the moneys available. Three provinces were able to make full utilization of their allotments under this grant.

The projects submitted by the provinces under the Cancer Control Grant cover a very wide field. With the assistance of the grants the provinces have been able to extend their laboratory and pathological services, to employ and train additional cancer specialists, to purchase radium, to extend their free diagnostic services, to set up provincial case registries and to intensify their programs of health education which are considered so essential to success in the fight against this disease.

A most important area of action and one that perhaps holds the greatest hope for the future is in the field of research. In this connection it is noteworthy that each of the provinces has earmarked a portion of its federal grant for the National Cancer Institute to support its extensive program of research into cancer.

Tuberculosis Control

The death rate for tuberculosis continues to decline without interruption. In 1950 there was a total of 3,582 deaths from tuberculosis across Canada representing a death rate of 25.9 per 10,000 population. This is a new record low contrasting with a death rate of approximately 200 per 100,000 at the turn of the century.

Over the past year more than \$4,000,000 or 85 per cent of the federal funds available for this purpose was actually expended by the provinces to strengthen and intensify their tuberculosis control activities. A four-fold approach has been developed to include efficient case-finding; adequate treatment facilities; successful rehabilitation of the patient; and finally a vigorous program of prevention.

Case-finding and detection services have centered around the hospital admission chest X-ray program, and the extension of mass survey activities through the use of mobile clinics and the undertaking of specific surveys. Since the National Health Program began in 1948, more than \$2,150,000 had been approved for the operation and development of the hospital admission chest X-ray program. To assist with the mass survey activities, 17 new travelling clinics have been established and 10 existing mobile clinics have been strengthened. Substantial funds have also been provided towards the support of established stationary clinics throughout the provinces.

In every province treatment facilities have been greatly strengthened with the aid of funds provided under the Tuberculosis Control Grant. Substantial quantities of special equipment have been provided both for sanatoria and clinics. During the past year special training has been provided for more than 75 physicians, nurses, laboratory technicians and other health workers, and sanatoria services have been strengthened by the employment of additional professional staff. With the aid of the Hospital Construction Grant significant progress has been made in overcoming the shortage of beds for tuberculosis patients by the building of new institutions or of extensions to existing sanatoria.

One of the most noteworthy contributions to the treatment of tuberculosis has been the federal assistance towards the purchase of streptomycin, P.A.S. (para-amino salicylic acid), and tibione. Before the inception of the grants program the use of streptomycin was reserved for the most urgent cases and in many instances was not provided free of charge. It is now made available without cost to all patients in sanatoria who might benefit from this form of therapy. Federal allocations for the purchase of streptomycin and other drugs to be used in the free treatment of tuberculosis patients now total more than \$1,669,000.

The rehabilitation of the tuberculosis patient is gradually receiving greater recognition and during the current fiscal year federal grants were approved for various projects in this field on behalf of 8 of the 10 provinces. For the most part these projects have been for the employment of additional staff and the purchase of special equipment for rehabilitation work.

As to prevention, the use of B.C.G. vaccine is being adopted more widely throughout the provinces for the immunization of children and adults. Substantial support has been given to this program through the federal Tuberculosis Control Grant. Other preventive measures supported by grant funds are concerned chiefly with public education through the use of films and other information media.

Mental Illness

Through funds available under the National Health Program, a community mental health program is being developed on a nation-wide scale. The Mental Health Grant is being used by the provinces to augment existing services provided by provincial divisions, for assistance to mental hospitals, for establishment of mental health clinics and psychiatric clinics in general hospitals, for research into mental illness and, perhaps the most important aspect, for the training of mental health personnel. Prior to the introduction of the federal mental health grant there were, in Canada, 14 full-time mental health clinics operating in school systems and five part-time clinics. Since then, 33 additional clinics (mental health, child guidance, and travelling) have begun work or are planning to start in the near future. Moreover, assistance was extended to 16 existing clinics by way of employment of additional staff and the purchase of necessary equipment.

The program of psychiatric care in general hospitals in Canada has also been enlarged considerably since the National Health Program began. Outpatient psychiatric clinics are operating at the general hospitals in St. John's, Newfoundland, Halifax and Saint John, New Brunswick. The Province of Quebec is setting up psychiatric clinics in five hospitals in the Quebec City area and 11 in Montreal and the surrounding district. The out-patient clinics for epileptics in Quebec and Montreal are being extended and a day hospital for psychiatric treatment has been organized at the Montreal General Hospital. Out-patient services at the Toronto Psychiatric Hospital are being increased and an out-patient service has been started at Victoria Hospital, London. The mental health service at the Toronto General Hospital (Wellesley Division) was extended and a mental health service at the Hospital for Sick Children has been provided. The facilities of the Psychopathic Hospital in Winnipeg and the Munroe Wing in the Regina General Hospital have been expanded. The Crease Clinic at Essondale, an outstanding example of a modern mental centre, was substantially assisted.

Federal funds are being allocated to mental hospitals for the employment of personnel ranging from psychiatrists, psychologists, psychiatric social workers and psychiatric nurses to occupational therapists, rehabilitation officers, teachers and attendants. Moreover, funds are being allocated for the enlargement of provincial mental health divisions as well as the extension of existing services. Under the federal Mental Health Grant more than 40 much-needed research projects are being developed.

Venereal Disease Control

As in previous years a grant in excess of half a million dollars was made available to assist the provinces in maintaining and extending their established venereal disease control activities. To round out the various provincial programs, projects assisted under this grant were closely correlated with existing measures financed both by provincial funds and the earlier federal grants.

Funds were utilized to aid in the maintenance of clinics, including mobile units, for diagnosis, treatment and consultation, as well as for the provision of free treatment in hospitals. Federal grants were also used to support laboratory services and in most provinces such services are now available to private practitioners at no cost. Free drugs for the treatment of venereal disease are also being provided to physicians.

Under the program definite advances have been made against the venereal diseases. However, in spite of the reduction in the numbers of infections and the cost of drugs, the pronounced rise in the cost per case detected and for necessary facilities and personnel has required that expenditures be sustained at a fairly constant level. The venereal disease problem persists as a serious threat and in order to cope with it intensive effort and adequate expenditure will be needed, not only in protecting the public health as a whole, but also in support of the defence effort, both the Armed Services and essential production.

In dealing with the problem, each provincial program has placed increasing emphasis on preventive and early detection measures including public education, intensive case-finding programs through mass blood testing, special examinations and contact tracing, as well as post-treatment follow-up. To perform these and related activities, federal grants are being widely used to strengthen provincial staffs through the employment of physicians, nurses, medical social workers and other trained personnel.

Included also is the exploration of new methods and techniques to evaluate their effectiveness in attacking the V.D. problem, applying those of demonstrated value in further reducing the prevalence of these infections. While

certain aspects of the problem have shown encouraging response there yet remain other particularly obstinate features which must be the focus of a concerted control effort. The continuing utilization of all resources will best ensure the ultimate objective of effective disease control.

Arthritis and Rheumatism

Although the National Health Program does not include a specific grant for arthritis and rheumatism, considerable support was provided to provincial activities in this field through federal funds available under the General Public Health Grant, the Professional Training Grant and others. In every province a portion of the former grant was earmarked for assistance to the Canadian Arthritis and Rheumatism Society which, through its national headquarters and various provincial branches, is the co-ordinating agency for all activities directed against these cripplers.

Besides this financial support to the Canadian Arthritis and Rheumatism Society a substantial grant was made to the National Research Council for research in the use of A.C.T.H. and cortisone. All provinces have allotted a portion of their share of the General Public Health Grant for this purpose.

Federal funds were also used by the provinces for the purchase of equipment and supplies for arthritis and rheumatism clinics and for physiotherapy departments in general hospitals. With the assistance of the federal grants a number of mobile clinics have also been established to bring diagnostic and treatment services to persons previously outside the range of existing clinics. Grant funds were also used to a limited extent for the training and employment of needed professional personnel to staff the various clinics.

Training of Health Workers

Federal funds available under the Professional Training, Tuberculosis Control, Cancer Control and other grants were used widely by the provinces to assist in the training of hospital and public health personnel. Federal allocations for this purpose exceeded \$1,200,000 during 1951-52.

During the year, a total of 1,357 health workers received professional training under the terms of the various grants. This number includes 510 nurses who were trained for public health work, for instruction and supervision in general hospitals, and for special work in such fields as obstetrics and mental health. In addition, 264 physicians received special training for work in provincial health departments or in other areas of public health work and in several specialized fields.

For work in the mental health field, 174 persons were given special training during the year. This number includes psychiatrists, psychologists, psychiatric social workers as well as therapists. Training was also provided to workers in many other fields of public health, including technicians for laboratory work, veterinarians for food control and milk supervision, engineers and inspectors for sanitary work, and dentists, health educators, hospital accountants, statisticians and a great variety of others.

The training of health workers continues to be a necessary means of assisting the provinces in developing their various services. It is therefore anticipated that the provinces generally will continue to make full use of the federal funds available for this purpose. In addition to providing special training, federal funds under the various grants were utilized to assist the provinces in employing more than 4,000 health workers to help staff provincial and local services.

BLINDNESS CONTROL

The Blindness Control Division carried on its work of encouraging the preservation of vision and the control of blindness through the medium of pamphlets, educational films and the supplying of material for radio programs produced by the Information Services Division. Assistance was given to various provincial authorities concerning visual problems.

Attention continued to be focused on the work of the four Glaucoma Clinics—one in Toronto, two in Montreal and one in Quebec. Plans were submitted to provincial authorities to assist in the formation of additional clinics. The control of glaucoma is Canada's most serious eye problem. The disease is common after age forty. It is insidious in onset and can only be diagnosed in its early stages, when treatment is most effective, by a medical eye specialist. Chronic glaucoma causes more blindness in Canada than any other eye disease.

A report was received on "A Survey of Methods used to Reveal Eye Defects in School Children" by oculists at the Hospital for Sick Children, Toronto, the survey being financed by a federal health grant. The very comprehensive report indicated that, by the proper use of the standard Snellen Chart, the vision of school children could be effectively screened by the school nurse or teacher if instructions and visual standards detailed in the report were followed.

Treatment Plan

As a result of the success of the experimental treatment scheme for blind pensioners carried out during the past several years, the program was put on a permanent basis. Newfoundland, Nova Scotia, New Brunswick, Quebec and Ontario have agreed to take advantage of the treatment scheme. Most of the treatment so far given has consisted of cataract extraction. The federal government contributes 75 per cent of the cost and each province the remaining 25 per cent.

The study into hereditary optic atrophy in a large family connection in the Ottawa area has been continued in collaboration with the Nutrition Division. Much valuable genetic information has been obtained and enough encouragment has resulted from the treatment of the few cases which have developed since the study started to justify the continuance of the investigation for a number of years. The study encompassed the largest family connection having hereditary disease which has ever been reported. More than 1,100 blood relatives are concerned, in some 270 families, a proportion of whom have a predisposition to blindness on the male side.

Study of Prevention

Further study was given to major blindness prevention problems. It is estimated that nearly half of all cases of blindness could be prevented by adequate treatment and that useful vision could be restored to at least 12 per cent of those now blind.

In connection with the administration of pensions for the blind (now called Blindness Allowances) the Blindness Control Division co-operates with the Welfare Branch in the administration of the Blind Persons' Act. The oculists who make the examinations are approved by the Minister and the eye reports are reviewed in the Blindness Control Division and blindness certificates are issued which enable the provinces to proceed with the payment of the blindness allowances under the provisions of the Blind Persons' Act.

To enable applicants for blindness allowance in outlying places to receive proper eye examination, oculists were sent to Newfoundland, Magdalen Islands, Gaspe area and some outlying portions of other provinces. It is noteworthy that more applications for blind pension, or blindness allowance, were received in outlying districts and areas where economic conditions are not good and where medical services are inadequate.

The Blindness Control Division maintained co-operation with the Canadian National Institute for the Blind. The Institute supplied eye glasses free or at cost to many unsuccessful applicants for blind pension who needed only glasses to improve their vision. In addition, the Institute supplied the Department with many eye reports and gave other essential assistance.

It is interesting to report that since January 1, 1952, under the provisions of the Blind Persons' Act, Indians and Eskimos have become eligible for blindness allowance.

The total number of blind persons registered by the C.N.I.B. at the end of 1951 was over 19,000 and the number of those receiving blind pension at that time more than 11,000.

CHILD AND MATERNAL HEALTH

Grants under the National Health Program have assisted greatly in improving maternal and child health in Canada and the Department's Child and Maternal Health Division continues to work with provincial health authorities and others in their efforts to bring about further advances.

By assisting the provinces, conferring with officials of the Health Insurance Studies Directorate in considering applications for federal aid for maternal and child health projects, programs for crippled children and research associated with such work, and by carrying on intensive health education, the Division is taking an active part in the national drive to reduce mortality and morbidity among mothers and infants.

Infant Mortality

It is apparent that the country is still losing too many infants but this situation continues to improve and there has also been a heartening reduction in the maternal mortality rate.

In 1950, out of every 1,000 babies born alive, 41 died during the first year. Deaths numbered 15,324. To this must be added those who were stillborn—7,179—making a total loss of 22,503. Child and maternal health statistics for the years 1926 to 1948 may be found in Table 1, p. 112, of the Annual Report of the Department for 1949-50. (See also Child and Maternal Health and Crippled Children, p. 29, in the Annual Report for the fiscal year ended March 31, 1951).

Of the 15,324 deaths which occurred in the first year, 9,018, or about 59 per cent, occurred during the first month. If the stillborn deaths are added, it is evident that the main emphasis must be placed on the care of the mother during pregnancy and on the care of the infant during the first few weeks of life.

Deaths in the first week comprise about 44 per cent of all deaths in the first year, or 6,553 out of a total of 15,192 (1949 figures).

The number of stillbirths which occur in a year is equal to half the total infant deaths in the year (7,275 out of 15,324) emphasizing, again, the need for adequate prenatal care and skilled attention at confinement.

About three-quarters of the births in Canada take place in institutions (72 per cent in 1948). British Columbia, Alberta and Saskatchewan had the highest percentages—96, 95 and 91 respectively.

Each year nearly 10,000 babies are born without a doctor in attendance, (9,678 in 1949). Many of the mothers were long distances from doctor or hospital and, no doubt, many of them lacked prenatal care. In passing, it should be noted that such mothers have the greatest need for health education and efforts are made to provide them with authoritative information on prenatal care and maternity by all informational means at the disposal of government.

The leading causes of infant deaths in 1950 were: respiratory diseases—pneumonia, 2,153, influenza, 296, bronchitis, 108—a total of 2,557; immaturity—2,273; congenital malformations—1,839; injury at birth—1,574; and diarrhoea and enteritis—1,092. In 1950, whooping cough caused the death of 234 infants under one year. (Deaths over that age numbered 23). This indicates the need for having babies immunized at an early age.

Child Morbidity

Surveys show that about 15 per cent of children are in some degree physically under par when they enter school and the percentage increases gradually during the first four grades, reaching the high proportion of 40 per cent, which applies for several years.

As the problem of child morbidity thus demands the highest priority education appears to be the most effective preventive measure, particularly during the prenatal period when parents are most receptive to guidance concerning the welfare of the baby. This educational effort should be continued during the pre-school period when the family's attention is centred on the child's welfare and development.

Federal Health Grants

Under the National Health Program, grants aimed at helping child and maternal work have assisted in the establishment of many worthwhile services. Two provincial divisions of Child and Maternal Health have been created; five provinces have purchased incubators for many of their hospitals; a Division of Child and Maternal Health is being set up in Quebec City; in New Brunswick, the director of the new Division of Child and Maternal Health has encouraged a number of local medical societies to set up committees to study infant and maternal morbidity and mortality.

During the year, under the National Health Grant for Crippled Children, all provinces have set up facilities for the care of cerebral palsy cases and have reinforced their services for crippled children.

Educational Work

The past year's activity of the Child and Maternal Health Division included a continuing educational program.

In this field the main media were publications. The books, "The Canadian Mother and Child" and "Up the Years—From One to Six", were distributed widely, but it was not possible to provide them to all who needed them or could use them profitably.

Since "The Canadian Mother and Child" was first printed, in 1940, 1,250,000 copies have been distributed. This book continues to be particularly useful in areas remote from medical care, but even urban mothers follow its advice and the book is widely recommended by attending physicians and clinics.

"Up the Years—From One to Six" also proved increasingly popular and efforts were made to maintain stocks of other publications constantly sought from the Department, including the "Daily Diet for Mothers" card and the folders on "Whooping Cough", "Poliomyelitis", and "Ten Points to Remember—Before and After Baby Comes". The color-film "Mother and Her Child", and the filmstrips "Nine to Get Ready" and "Introducing Baby", also proved useful to public health nurses as teaching material.

Research Work

Research activities included publication of the final report on the British Columbia Wetzel Grid Study. The Report is being made available to those interested in use of the Grid, as an adjunct to school medical services.

A research project on Breast Abscess and Pustules in Babies was undertaken in Winnipeg, under direction of one of the Division's pediatric consultants, assisted by the nursing consultant. Assistance was also given by the Provincial Laboratory.

The nursing consultant spent some months in British Columbia and Saskatchewan consulting with hospital and public health officials concerning their programs for the care of premature babies. Consultations and institutes were held with groups of nurses in hospitals and in the field.

The Division was called upon to advise in regard to the development of provincial services functioning on behalf of mothers and children. The Director conferred with specialists and others on the advisability of concerted national action on Maternal and Child Health and presented a brief concerning this proposal to the Dominion Council of Health.

DENTAL HEALTH

To meet the burden of tooth decay, periodontal disease and malocclusion in Canada by treatment alone is far beyond the capacity of the dental profession, but the solution to the problem does not lie so much in expanding the dental profession as it does in reducing the incidence of disease and malocclusion by the use of preventive methods. There is sound reason to believe that, with the effective exercise of our present knowledge, and the co-operation of an informed public, well over half of the burden could be inexpensively prevented. Then, with a small expansion of the dental profession, aided by an adequate supply of dental hygienists, the balance could be handled by initiating early, regular, systematic treatment of children, beginning with the pre-school child.

Therefore, the efforts of the Department's Dental Health Division have been directed to research in the preventive field, health education, and the development of properly organized, early treatment programs for children. In addition to this work, and in some instances in relation to it, other services have been provided for most of the other divisions in the Department as well as for provincial departments of health and for the Canadian Dental Association.

Fluoridation Study

The Brantford-Sarnia-Stratford Water Fluoridation Caries Study was continued during the year with the examination of 1,400 children at Stratford, Ontario. The Department's first report on this study, covering 1,800 children at Brantford and 1,800 at Sarnia, was issued in September, 1951 and amended

in January, 1952 by the addition of data relating to 1,400 Stratford children who had been examined during October and November, 1951. Both reports were reproduced by the Journal of the Canadian Dental Association.

The findings indicated that the caries incidence had worsened slightly between 1948-51 in both the Sarnia and the Stratford control groups of children and that an appreciable decrease in caries incidence had occurred in all ages of the test group at Brantford, where one part per million of fluorine in the form of sodium fluoride, has been added to water since June, 1945.

The relationship between the presence of fluorine in a water supply and its presence in tooth tissues is being investigated. Extracted teeth are obtained annually in all three cities. These are analysed by the Food Chemistry Department of the University of Toronto.

During the year many communities became interested in water fluoridation and the Division's officers were called upon to answer a large number of questions and to address many interested organizations.

To meet the needs of public health officials planning water fluoridation an outline of recommended procedure has been prepared. This outline includes standardized methods of recording caries experience, standardized examining methods and essential statistical procedure. The aim is to provide health officials with a reliable basis for reports, to facilitate obtaining additional information concerning dental effects of fluoridation, and to make possible a comparison of data between fluoridating communities in different parts of Canada.

Other Studies

In conjunction with the water fluoridation caries study, and using the same samples of children, a study was made of the public health application of a new method of measuring quantitatively the prevalence of gingivitis in a population group. This method, devised by the University of Illinois and called the P-M-A Index, provides a quick method of recording information relating to three segments of gum tissue adjacent to each tooth, i.e., the interdental papilla, the marginal gingiva and the attached gingiva. It gives promise of having a broad usefulness where it is desired to obtain reliable information concerning gingivitis resulting either from local or systemic conditions affecting population groups.

Assistance in making the P-M-A Index Study was given by the Ontario Department of Health. A bacteriologist and periodontist from the University of Toronto was retained as a consultant. Statistical work in connection with both the caries study and the P-M-A Index Study was supervised by the Research Division and much help was received from the Nutrition Division.

A dentist and dental nurse assisted the Nutrition Division on a survey of a sample of 1,000 Indian children located at various points across Canada and also on a survey of school children at St. Vital, Manitoba. This provided an opportunity to obtain data on dental health conditions in different segments of the Canadian population.

Model Preventive Service

The pilot model of a Dental Preventive Service set up last year was continued. The purpose of this project was primarily to develop and evaluate a purely preventive dental service in relation to a general health service such as that provided by the Civil Service Health Division. In addition, it was desired to ascertain the value of dental hygienists in such a service where the group being served is large enough to require additional staff.

Informational Work

The demand for dental health educational materials, produced in co-operation with the Information Services Division, reached an all-time high during the year. The entire stock of certain publications was completely exhausted long before the end of the year, with the demand from the provinces still being pressed. The Dental Health Manual produced for the use of teachers and others engaged in teaching dental health proved very popular.

Scientific dental health exhibits are now routinely requested for all major dental conventions in Canada and there are advance requests two years ahead. These exhibits are accompanied by an information officer from the Information Services Division and a dentist from this Division. In most cases this team appears on the general program of the convention dealing with dental health subjects.

While the division's publications, reports, exhibits and posters have been much more widely used than its films and filmstrips, these too have come in for considerable favourable comment and use. One film, after receiving an international award at a film showing in Venice, was purchased by the film library of the Encyclopaedia Britannica.

Federal Health Grants

Co-operation with provincial departments of health in the development of sound dental projects under the federal grants has been a major activity. The following are examples of dental health projects supported by federal health grants in various provinces—treatment and health education services for pre-school and early grade school children; dental clinics for children in rural areas; post-graduate training in public health dentistry; assistance to certain provincial and municipal health departments to provide dentists and dental hygienists for the treatment of school children; equipment and staff for mobile clinics serving children in rural areas; studies concerning tooth decay, cleft palate and the use of sodium fluoride in caries control.

The Division aims at a close working relationship with its counterpart in each provincial department of health. Eight of the ten provinces now have active dental health divisions operating under the direction of a dentist with a public health degree. Five of these have been created during the last three years, with the help of federal health grants. The division also continues to maintain close liaison with the Canadian dental profession.

EPIDEMIOLOGY

The Epidemiology Division performs three major services: prevention and control; technical information; and research studies, including statistical analysis. In providing these services, considerable time is expended by divisional personnel in giving technical assistance to and consultation on numerous projects, or enquiries related to these services. Although a few projects are entirely confined to divisional participation, most investigations and field studies are carried out in co-operation with other divisions or departments at various levels of government, or with voluntary agencies, including universities.

Federal Grants

During the past year a number of federal research and general public health grants, which had an epidemiologic application, were approved. Consultative assistance was given by the Epidemiology Division on many of these projects. Projects were undertaken in almost every biological classification of disease, as well as on a number of studies relating to chronic disease and public health administration in epidemiology.

For example, a Division of Communicable Disease Control was established in New Brunswick. Among the chronic diseases, multiple sclerosis prevalence studies were continued in Montreal, Winnipeg and Kingston as well as in the province of Saskatchewan. A diabetes survey, to determine a more accurate incidence of this disease in the general population, was carried out in three representative communities in Ontario.

Considerable attention was given to virus research in Canada. Two separate studies to determine the prevalence and characteristics of Lansing strain poliomyelitis were conducted amongst Eskimo populations in northern Canada by research teams in Ontario and Quebec.

Other epidemiologic studies on encephalomyelitis in Saskatchewan, "Q" fever in Quebec, and the production of influenza vaccine for trial purposes, have all been carried out through Health Grants during the past year.

Studies on parasitic and mycotic infections have similarly been supported by Health Grants. The incidence of cercarial dermatitis, trichinosis, and dog tapeworm, have all been under study in Ontario; a survey to determine the prevalence of histoplasmosis in the province of Quebec has also received support.

The above mentioned projects by no means exhaust the list of epidemiologic studies which have been supported by this department through the federal Health Grants. Studies of long standing, such as the Sylvatic plague and Rocky Mountain spotted fever detection surveys in Saskatchewan and British Columbia, have continued to receive support, as have diphtheria immunity and carrier studies in Ontario. Tuberculosis, as well, received its share of assistance. Some of the more important epidemiologic projects for tuberculosis include case-finding programs through the routine X-ray examination of hospital admissions, and the mass X-raying of the general population. The improved production of BCG vaccine, along with its continued use, particularly in the province of Quebec, has also been carried out.

Two studies on the epidemiology of Staphylococcus Aureus Hemolyticus received both financial and consultative assistance,—one in Vancouver on the incidence of pustular infections in the nurseries of the Vancouver General Hospital, and the other a research investigation into the spread of breast infections in Winnipeg hospitals.

Consultations

Technical and consultative assistance has been given the Department of Public Health and Welfare, Province of Manitoba, in investigating an undue incidence of breast infections which have been occurring in Winnipeg hospitals over the past few years. At the height of the epidemic in 1948 the incidence of infection in one hospital reached 14 per cent of all confinements. Since that time the incidence has fluctuated from less than 1 per cent to 10 per cent.

In response to requests from provincial health departments, the latest information on the effect of inoculations and other injections on the incidence of poliomyelitis, as well as the value of the use of influenza vaccine as a control measure, was distributed to all provinces.

The Northern Administration and Lands Branch of the Department of Resources and Development, and the Indian Health Services, consulted the Epidemiology Division last summer for assistance in controlling an epidemic of paratyphoid "B" at Gros Cap, N.W.T. In this instance, a fish packing plant which quick-froze fish for an international market was involved.

Material and consultative assistance have been provided in carrying out a diphtheria carrier study among navy personnel on the west coast; consultant service was given to the department's studies on hereditary optic atrophy in the Ottawa Valley and hydatid disease in northern British Columbia; and the Division extended technical assistance and planning services related to the International Joint Commission's Air Pollution Study in Detroit and Windsor. Assistance was also given to the Civil Defence Co-ordinator in establishing a reporting system for morbidity and mortality statistics for civil defence purposes.

Research and Survey

Aside from the projects which have received financial support through federal health grants, and in which the Epidemiology Division is giving technical and consultative assistance, a number of local research studies in Ottawa and vicinity were also in progress. These were largely in conjunction with other divisions within the Department and the City of Ottawa Health Department. Among the more important of these projects was a Multiple Sclerosis Prevalence Study, associated with the Ottawa Chapter of the Multiple Sclerosis Society of Canada, and the Ottawa Academy of Medicine; a study to determine the incidence of Puerperal Mastitis in Ottawa; an investigation to study the protective value of influenza vaccine amongst the aged and debilitated in Ottawa's institutions; and a Poliomyelitis study to determine the effect of injections and other possible "trigger mechanisms" on the incidence of this disease.

Items of Special Interest

The Division continued to have the prime responsibility for the co-ordination of the department's activities in directing Canada's Sickness Survey during 1950-51-52. This survey is the largest project of its kind that has ever been undertaken in this country, and the results from it are expected to have wide and varied uses once the mass of data has been analyzed. As well as obtaining estimates of the volume of sickness and permanent disabilities which occurred in Canada during the survey year, information on payments for medical care and types of service received will also be compiled. Other valuable information relating to disease incidence and medical care planning is expected to result from this survey.

The 59th meeting of the Dominion Council of Health requested that the Epidemiology Division collaborate with provincial health departments in the planning of a "model" communicable disease reporting system for Canada, with a view to standardizing and improving this procedure throughout the provinces. There is a great need for an improved and unified disease reporting system as, at present, considerable variation exists in both the number of diseases reported and their control in various provinces.

In January, 1951, the Tuberculosis and Venereal Disease Control Division of the Department was merged with the Epidemiology Division. This amalgamation had been visualized for some time, and was based on the observation that many communicable diseases, including venereal disease, have greatly diminished as health problems during the past ten years. A new service, which is becoming increasingly important to the Department, is the drafting section of the Epidemiology Division. The section provides a service to divisions within the Department in depicting scientific data through the preparation of various graphs, diagrams and tables, which may be used for publications or lectures.

HOSPITAL DESIGN

The Department has taken an active part in promoting hospital construction in Canada with the provision of assistance to Provinces under the Hospital Construction Grant of the National Health Program and by assistance to administrators and architects in the design and planning of hospitals, through the facilities of the Hospital Design Division. A consultant service has been provided for those concerned with hospital design, giving constructive criticism of plans and determining the overall planning policy for various types of hospitals. The field covers not only general hospitals of all sizes but chronic and convalescent hospitals, mental hospitals and public health buildings.

This is the close of the first four years of a five-year federal Hospital Construction Grant Program. In 1948 there existed an urgent need for hospital beds of all types, and considerable progress has been made throughout Canada in meeting the shortage of active treatment beds. The objective set was 40,000 new beds of all types and, to date, more than 36,400 beds have been either completed or approved for construction. These can be broken down into 20,700 active treatment hospital beds, 4,000 chronic and convalescent patients' beds, 8,000 mental beds and 3,700 beds for tuberculosis patients. The federal contribution towards this accommodation was \$39,223,000. During the year 84 new projects were approved.

A change in the Order-in-Council for 1951-52 permitted increased scope in the Hospital Construction Grant by making available a grant of \$1,000 for each 300 sq. ft. of floor area of a hospital devoted to combined laboratories, and a similar grant for areas devoted to outpatient services.

For the first time federal aid was given to assist in the construction of nurse's residences on the basis of \$500 for each nurse's bed and there was a total of 1,158 nurses' beds approved for federal assistance in the past year.

Besides being of material assistance to hospital construction throughout the country, the grant has contributed to the raising of the general standard of hospital design because, to be eligible for assistance, a construction project must conform to the minimum standards which have been set up by the Department, after consultation with the provincial Health Departments and leading hospital authorities.

At the request of the U.S. Public Health Service, 50 copies in French of the Division's Standards and booklet were forwarded for use in the Far and Near East in areas where only French is spoken.

INDUSTRIAL HEALTH

The Industrial Health Division continued to provide technical and consultative services and to act as a central source of information for provincial Health Divisions and Health Departments. It also provided technical aid to federal agencies, including crown companies, on various aspects of occupational health. Activities are classified into four main groups; assistance to provincial programs; medical and nursing consultative services; laboratory services, including research and surveys; and educational and technical information services.

Federal Health Grants

Through the General Public Health Grants, financial assistance totalling \$274,361, was given to the provinces. \$110,549 was approved for Ontario and of this amount \$85,199 is being used to organize an Industrial Health Services project at Kitchener. Other grants were to the University of Toronto for a survey of atmospheric pollution, an investigation of the effects of noise on hearing, and an investigation of the physiological effects of Alumina, Silica, etc.; to the Division of Industrial Hygiene for equipment including that required for a travelling X-ray unit.

The Quebec Division of Industrial Hygiene received \$131,187 for reorganization and expansion of the Division of Industrial Hygiene. Nova Scotia and New Brunswick received grants for equipment and expansion of laboratory services, respectively. Saskatchewan was given a grant for the employment of a Director of Occupational Health.

Research and Surveys

New and enlarged laboratory facilities were brought into operation during the fiscal year. Officers of the toxicology section, in conjunction with the clinical staff, continued to provide scientific and medical advice to provincial Departments of Health, other federal agencies, and industries. This section also carried out a series of animal experiments to determine the toxic effects of the new organic insecticide, Aldrin, and this work is to be continued during 1952-53.

The Field Surveys Section concentrated on two specific projects during the fiscal year. The first of these was a study of the exposure of Quebec apple growers during the application of the new insecticide, Parathion, which has been responsible for a number of deaths and cases of severe illness throughout North America during the past two years. The second project was the first stage of a comprehensive environmental survey of the Yellowknife, N.W.T. area, where arsenic from roaster fumes has contaminated the townsite and adjoining territory. Both of these projects will be continued during the summer of 1952.

The Physics Section made use of X-ray diffraction to determine the quartz content of dust samples submitted by the provinces, and has procured an Advanced Philips Electron Microscope to facilitate microscopic research.

The Chemistry Section carried out various tests on the efficacy of industrial respirators because of the importation of low-grade respirators from foreign sources.

The services of the staff were made available to other agencies and organizations through various committees. As a special service to industry, a series of lectures on urban air pollution was conducted.

A survey on noise and ventilation was conducted for the Department of National Defence and advice on several problems was extended to the National Research Council. A series of articles on weight-lifting in industry was written for the Industrial Health Bulletin.

The activities of the Health Radiation Section were greatly expanded during the year. Visits were made to most of the larger industries in Canada using radioactive isotopes, and close relationship established with all phases of radioactive research. In July, 1951, the Film Monitoring Service which provides a method of measuring exposure to radioactive materials, was transferred from Chalk River to this Section and many groups have made use of this service. An X-ray Laboratory is under construction where research on development of special X-ray monitoring film will be carried out. A number of radiation surveys were made in various departments, and advice given in many cases where new radioactive laboratories were being constructed.

Consultation Services

The Division acted in a consultative capacity on aspects of industrial health, both in civilian and military industrial organizations. Consultant services for industrial nursing were provided for industrial nurses, management, university nursing schools, and professional nursing organizations.

Medical Officers and the senior Nursing Consultant spent a large part of their time with various aspects of Civil Defence Health Services.

Information Services

Through the medium of the monthly publication, "The Industrial Health Bulletin", professional personnel concerned with workers' health, management, and labour groups, were kept informed about developments in the field of safety, health, general working conditions, and any new processes or material which might affect health. One issue of the Industrial Health Review was distributed. Information and technical assistance were provided for industrial and government sources on the various aspects of ventilation, lighting, toxicological and chemical hazards, and general working conditions.

MENTAL HEALTH

The new activity resulting from the introduction of the National Health Program continues to be a major factor in the mental health field and utilization of the federal grants available is increasing.

During the year 37 new projects were received from the provinces, amounting to \$810,707 and 190 continuing projects amounting to \$3,706,255 were received. This was allocated as follows: assistance in organization of mental health divisions, \$171,897; assistance to mental hospitals, \$2,100,314; assistance to psychiatric services in general hospitals, \$595,679; assistance to clinics, \$416,951; assistance to training programs, \$339,506; bursaries, \$181,225; research, \$435,965.

Research

This year 40 research projects were supported under the Mental Health Grant. Through these projects, increased knowledge is being gained regarding the community aspect of mental illness, statistics, clinical aspects of psychiatric conditions and related laboratory procedures.

As a result of this assisted research, there are now a number of well-equipped research centres, such as the Munroe wing of the Regina General Hospital; the laboratories of the Allan Memorial Institute of Psychiatry, Royal Victoria Hospital, Montreal; the laboratories of the University of Western Ontario, London; and the Crease Clinic Research Unit of the University of British Columbia.

Research projects under the Mental Health Grant were reviewed by the research sub-committee of the Advisory Committee on Mental Health, which met twice during the year to consider individual projects and to review mental research in general.

Public Education

In conjunction with the Information Services Division, the Mental Health Division continued an active program of public education. One new pamphlet, "Baby Talk", and a new film, "Breakdown", were produced during the year. The demand for further publications and films continued to grow, as evidenced by requests from provincial health educators, home and school organizations and by sales and distribution reports. Large quantities of the Child Training folders were distributed, in English and in French, as well as a considerable number of copies of "The Backward Child." The Child Training series of films, "Ages and Stages" continued to be used widely and a third, "The Frustrating Fours and the Fascinating Fives", was completed in this series. It will be distributed late in 1952.

The film "Breakdown" introduced a new aspect in the production of mental health films in that it was financed by the provinces under their Mental Health Grant allotments on a pro rata basis, the federal department providing funds for scripting and research.

Mental Health Program

During the year a start was made in compiling information concerning the mental health programs across Canada. Basic information regarding the provincial programs having become available, a comprehensive review of these programs is being prepared.

Health Survey

Mental illness and other psychiatric conditions were not covered in the National Sickness Survey, but arrangements were made to have a specific questionnaire on mental illness completed in one province. This was done and an analysis of it started. It is hoped, from this study, to gain some basic knowledge of the survey method so that selected communities may be surveyed in the future.

Working Party on Civil Defence

A working party of psychiatrists, representing practitioners, administrators and educationalists, was formed to discuss the mental health aspect of the civil defence program. Following its meeting, recommendations were made to the chief of the Civil Defence Health Working Group and appropriate material was published in the department's First Aid Supplements and Civil Defence Health Services manuals.

Statistics

The subcommittee on statistics of the Advisory Committee on Mental Health was active during the year and a two-day meeting was held at which discussions took place with representatives of the Dominion Bureau of Statistics. As an outcome of these discussions, the reporting system and schedules by which mental health statistics are obtained, and the annual publication of the Bureau covering them, were reviewed and recommendations were made which should yield much more information on the incidence and other aspects of mental illness.

A medical statistician was available to the Division and a number of reports were prepared, including "Mental Illness in Canada, as reflected by Mental Hospital Admissions, 1932-47", "The Data in the Annual Report on the Mental Institutions of Canada", and "First Admissions of the Aged to Canadian Mental Institutions, 1932-49."

Consultant Services

The Mental Health Division continued to provide consultant service to provincial departments of health and to other divisions of the Department, particularly to Narcotic Control, Hospital Design, Indian Health Services and Immigration Medical Services. Consultant service was also provided to the National Film Board and the Dominion Bureau of Statistics.

During the year there was increased interest, particularly in British Columbia, in the problems of narcotic addiction. In conjunction with the Department's Narcotic Division, this Division reviewed developments in the treatment program carried on by the United States Public Health Service and prepared a report on recommendations regarding the problem in British Columbia.

Advisory Committee

While the full Advisory Committee on Mental Health did not meet this year, it was kept active by correspondence and other contact between members, and two of its subcommittees, those on Statistics and Research, were most active.

Professional Information

During the year a booklet on "Community Mental Health Services in Canada" was prepared and distributed to professional personnel.

NUTRITION

The Nutrition Division provides special technical services, in co-operation with a number of other Divisions of the Department, directed generally toward the maintenance of health and working efficiency of Canadians, and designed specifically to assist provincial programs. In addition there are international functions related to the World Health Organization, the Food and Agriculture Organization and the Commonwealth Program for Technical Assistance in Asia. Contact is also maintained with nutrition workers and organizations in several countries.

Federal Health Grants

Financial assistance has continued under the General Public Health Grants for the maintenance and extension of nutrition services in Ontario, Nova Scotia, and Saskatchewan. Public Health Research Grants for various kinds of problems contributing to nutritional knowledge have been continued in most universities.

Research—In addition to research under the federal grants there are several projects carried out by the department, usually as a cooperative effort of several divisions, working with provincial and local personnel.

New research during 1951-52 included a nutrition survey in one area of Manitoba, and food calculations of various kinds. Several projects continued from previous years included: (a) the blindness study (b) four different feeding projects in Indian Residential Schools. During 1951 the optic atrophy study completed the plotting of seven generations including 1,430 living persons, distributed among 370 families. Fifty of these families were visited, while laboratory and clinical studies were made on 70 selected individuals. The medical social worker was on loan part of the time to organize the survey of social workers in the Province of Quebec.

The feeding projects are beginning to show some results. In one school where alternate pupils received vitamin C tablets and placebos it was found that blood levels differed, but no other aspect of general health or of gingivitis seemed to be altered. In a school using flour "enriched" with vitamins, iron and bone meal, anemia developed and may be the result of interference by bone meal in the absorption of iron. In another project the health value of skim milk powder is being further studied.

Research in the Experimental Kitchen has proceeded along three lines. For Civil Defence purposes some 27 canned and packaged foods commonly found in households and suitable for an emergency stock of food have been studied as to keeping qualities. Some were beginning to deteriorate at the end of 12 months. Work on civil defence manuals has also been done. For small hospitals, where a consultation service is provided to provincial governments building under health grants, series of recipes have been developed both for moderate cost and for nutritional improvement (high protein diets). Bread of various kinds is being baked regularly for a project of the Food and Drug Divisions. Ten hospitals and eight cafeterias in public buildings were given advice on food service.

Information and Education Service.—No new materials were produced during 1951-52. Funds and energies were directed toward revising and reprinting materials previously issued. Work was started, however, on a new film on nutrition, and also on a new poster. The second edition of a "Table of Food Values Recommended For Use in Canada" was received and placed on sale by the Queen's Printer. This Division also carried out consultative duties for the Nutrition Divisions of both F.A.O. and W.H.O.

PUBLIC HEALTH EDUCATION

By the very nature of their responsibilities, many of the Department's services were active in the field of health education, continuing this year to assist the provinces in such work and to provide them with informational materials. These efforts were co-ordinated through the Information Services Division, as detailed in the review of that Division's activities in the Administration Branch section of this Report.

The Department continued its active general health education work, issuing material in all media and supplementing, with displays, leaflets, etc., programs initiated by provincial, municipal, professional and voluntary health organizations.

Federal and provincial health educators correlated their programs by frequent correspondence and met to discuss their joint effort on occasion of the annual meeting of the Canadian Public Health Association.

Divisions patricularly active this year in informational work included Food and Drugs, Dental Health, Mental Health, Child and Maternal Health and Nutrition. Considerable valuable health material was produced by the Health Planning Group, under the Department's new responsibilities in the field of Civil Defence. This included the issue of manuals on such subjects as Basic First Aid, Home Nursing and disaster health services generally.

PUBLIC HEALTH LABORATORY SERVICES

Under the impetus of increasing demands from the provinces for assistance the work of the Laboratory of Hygiene continued to expand. Collaborative efforts with universities in research fields of mutual interest also were extended, particularly in the fields of biochemistry and immunology. The study of oral methods of immunization of children was enlarged and several of the provinces are actively co-operating in large-scale human trials.

The biochemical laboratory established at the Ottawa Civic Hospital is demonstrating its value and a start has been made in methods of surveying the accuracy of certain biochemical diagnostic procedures carried out by hospitals. In particular a survey of the performance of blood sugar determinations for the diagnosis of diabetes is being carried out in one province.

Five of the provinces have requested that the staff of the Laboratory of Hygiene undertake a survey of their public health and hospital laboratory services.

SECTION OF VIRUS DISEASES

The major activities of the Virus Section during this year were partly concerned with laboratory investigations of several epidemics of viral origin in Canada, and partly with the diagnostic service on human virus diseases, which was provided to the Provincial Laboratories of Health, the Department of Veterans Affairs and to various hospitals and institutions. Further activities were related to studies in old age groups of the human population on the immune response and protection after vaccination with polyvalent influenza vaccines.

Research work was successfully carried out on the development and standardization of stable non-infective reagents for the laboratory diagnosis of virus diseases, and research has been continued on neurotropic viruses, with particular emphasis on strains of poliomyelitis and related viruses. This work was greatly facilitated through the aid of the Rockefeller Foundation, New York, who made the services of one of their medically-qualified virus experts, Dr. S. F. Kitchen, available.

A training course in laboratory procedures for the diagnosis of virus diseases in man was given to senior personnel of the Laboratory Divisions of the Provincial Departments of Health in May, 1951.

Investigation of Virus Epidemics

During January, 1951, an influenza epidemic made its appearance in Canada with large numbers of cases reported from all provinces. The Virus Section, in close co-operation with the Provincial Departments of Health, carried out the laboratory investigation of the epidemic.

Virus isolation attempts were carried out on throat washings and were successful in 60 per cent of a total of 60 samples. The virus strains were identified as A primes and were found to be identical. They were closely related to the A-prime strains isolated in Sweden in 1950 and in England early in 1951. Two hundred paired sera of infected individuals were tested during this epidemic and a significant increase in antibody titre was demonstrated in 82 per cent of these specimens. Comparison of the results obtained with the individual serological tests indicated that the complement fixation test was the most efficient diagnostic procedure, showing a significant antibody increase in about 77 per cent of the cases, whereas with the haemagglutination-inhibition test, an increase of antibodies could be shown in only 71 per cent of the cases. The antibody response in the infected individuals confirmed the results obtained with the virus isolation attempts.

During the summer months of 1951, the Virus Section carried out a collaborative study with several hospitals in Montreal and Ottawa on clinical cases of non-paralytic poliomyelitis. One hundred and twenty-four cases were investigated and serological tests performed in the Virus Section revealed that in seventeen cases, an infection with mumps virus was responsible for the patients' neurological symptoms.

Investigation of Immunological Response to Influenza Vaccines in Old Age Groups

In the latter part of 1951 and early in 1952, an investigation was carried out in collaboration with the Division of Epidemiology of this department on the immunological response to polyvalent influenza vaccines in older age groups of the human population. The experience in the past year has shown that the mortality rate caused by virus influenza was highest in individuals over fifty years of age. Protection by immunization was, therefore, studied in older age groups. Several homes for the aged in Ottawa were chosen for this work and individuals were immunized with a polyvalent influenza vaccine. Sera were collected from these cases before and three weeks after vaccination. About 730 samples of serum were received and 3,100 serological tests were carried out in the course of this investigation. These studies have not yet been concluded but will be summarized in next year's Annual Report.

Diagnostic Services for Virus Diseases

The serodiagnostic service, which was established in 1950 in close collaboration with the Provincial Laboratories of Health, has been expanded considerably during the past two years and the number of specimens received from the provinces has been doubled during 1951 as compared with the previous year.

Training Course in Laboratory Diagnosis of Virus Diseases

In May, 1951, a training course in laboratory diagnostic procedures on virus diseases in man was given to senior personnel of the Laboratory Divisions of the ten Provincial Departments of Health. Particular emphasis was given to the serodiagnosis of pneumo-, dermo- and neurotropic viruses. Methods of virus isolation were also demonstrated.

Following the course, the Virus Section prepared and distributed to the Provincial Laboratories standardized non-infective antigens and immune sera for the diagnosis of Influenza A and B, mumps and Newcastle disease.

Information and Strain Typing Centre for Influenza

In January, 1951, a Canadian Influenza Information and Strain Typing Centre was established at the Laboratory of Hygiene and an advisory committee on influenza was formed including representatives of the Departments of National Health and Welfare and Agriculture, of the combined Canadian Armed Forces and the universities of Montreal and Toronto. In April the Director General of the World Health Organization designated the Laboratory of Hygiene as a WHO Influenza Centre. Since then the Influenza Centre has remained in constant communication with WHO, Geneva, and the Influenza Centres in London and Washington, frequently exchanging detailed scientific information on influenza virus strains isolated in current epidemics.

New Virus Laboratory

As facilities of the present quarters of the Virus Section have been inadequate the necessity of providing a new Virus Research building was reviewed and the Department was given approval to proceed with the necessary planning for a modern laboratory building at Tunney's Pasture in the West End of Ottawa.

Plans include special equipment and air conditioning to ensure the safety of the personnel working in the building. An effective airlock system has been planned to isolate the "contaminated" areas from the clean areas, with decontamination features to eliminate the danger of carrying infective materials beyond the isolated area. The new building will provide facilities to investigate virus diseases, such as Queensland fever, typhus, Rocky Mountain spotted fever, poliomyelitis and similar neurotropic virus diseases, too dangerous to be handled in an average laboratory environment.

SECTION OF BIOLOGICS CONTROL

The Biologics Control Section was formed as the result of a re-organization within the Laboratory of Hygiene. This had the effect of consolidating all the work carried out under the authority of the Food and Drugs Act, for which the Laboratory of Hygiene acts in a technical and advisory capacity to the Chief Dominion Analyst and, as well, facilitated the more efficient handling of problems related to immunological research and studies on antibiotics in which the laboratory is engaged. This section is divided into four Sub-Sections.

(a) Biologics Control

The routine testing for potency, safety and sterility of biological drugs (vaccines, toxoids, antitoxins, etc.) was carried out as usual. Biological assays for diphtheria and tetanus toxoids were carried out at capacity.

Control testing of B.C.G. Vaccine was continued. Products from manufacturers are checked routinely for freedom from extraneous bacteria, total count of B.C.G. organisms, safety and tuberculogenic qualities.

An attempt is being made to perform more tests for safety, pyrogen and sterility on parenteral preparations not subject to licence. Lists of parenteral materials are obtained from the Inspection and Labelling Services, Food and Drug Laboratories, and samples are selected at random for test purposes. In this manner, it is hoped to eventually cover all manufacturers distributing parenteral materials in Canada.

Pyrogen tests of transfusion sets, intravenous solutions and distilled water, were routinely carried out for the various blood banks and the Canadian Red Cross Blood Donor Service.

Inspections of Canadian and United States biologic manufacturers' establishments were carried out as usual. The Department has been receiving an increasing number of requests for Canadian biologic licences, the majority of new requests being for antibiotics, liver extract (injectable) and A.C.T.H., all of whose establishments are inspected before a licence can be granted.

(b) Immunology

Immunization studies in humans were continued. The studies on methods and materials for the immunization of infants, which were started in 1946 in collaboration with McGill University and the Child Health Association of Montreal, were completed. An article on "The Effect of Inherited Antibodies on the Immunization of Infants" was published in the December, 1951, issue of the Journal of Pediatrics. The results show that (1) it is not only possible but desirable to immunize infants beginning at three and four months of age; (2) it is advantageous to mix several antigens, i.e., diphtheria, tetanus and pertussis, for simultaneous injection; and (3) inherited antibodies present in the sera of infants under six months of age do not interfere with subsequent immunization against diphtheria, providing a highly-potent diphtheria toxoid is used. Studies are now being planned to determine the effect of varying the dosage of diphtheria and tetanus toxoids in immunization programs for infants.

The studies on oral immunization against diphtheria and tetanus (lockjaw) were continued. The results obtained on trial groups at McGill University were highly encouraging. The studies were, therefore, expanded to include large groups in Victoria, Vancouver and Winnipeg. The latter studies are in collaboration with the provincial and local public health authorities in the localities concerned. Other studies, using smaller groups, were started in order to determine the pattern of oral immunization. The Ontario Veterinary College is participating in the latter phase of this work.

Approximately 1,500 humans are taking part in this study, varying in age from primary school to adulthood. This represents an extremely large experiment since at least two blood samples are obtained from every subject on test and, in some instances, five or six specimens are needed. The antitoxin levels for diphtheria and tetanus are determined in each serum and as a further control, whooping cough agglutinin titrations are performed in an attempt to show that no non-specific rise has occurred. This is possible since there are no whooping cough antigens in the oral preparations.

Experimental work on H. pertussis vaccine was continued and extended. The Laboratory of Hygiene's method for the quantitative estimation of H pertussis agglutinins was published in the Journal of Clinical Pathology, November, 1951.

Studies were started on anaroebic organisms. Particular attention is to be paid to the botulinus group in which it is planned to investigate toxin-toxoid production and the feasibility of immunization by oral and parenteral means. This is a continuation of work that was started several years ago and which has been held in abeyance for the last two years.

(c) Chemistry and Pharmacology

Fundamental research on the mode of action of penicillin was continued. Nucleotides from yeast nucleic acid were separated and purified by column chromatography and a preliminary study of the utilization of these compounds by Staphylococcus aureus was completed. A paper detailing this work "The Oxygen Uptake by Staphylococcus Aureus and its Inhibition by Penicillin" was presented at the Annual Meeting of the Society of American Bacteriologists in May, 1951.

A brochure on the chemical tests employed at the Laboratory of Hygiene, "The Chemical Estimation of the Potency of Antibiotics", was prepared and is now available for distribution.

Studies have been started on antibiotic inhibitors. Bacterial strains have been found which produce a Chloromycetin reductase, thus confirming at least one report in the literature and, in addition, crude soybean phosphatides have been fractionated in an attempt to determine whether this material contains the controversial Streptomycin inhibitor.

Phenol co-efficients are being routinely performed. Special studies have been conducted on methods for assaying disinfectants and on the efficiency of aerosols. Techniques have been developed for the determination of phosphorus, calcium and nitrogen and a micro-Kjeldahl method for nitrogen has been established.

(d) Antibiotics and Disinfectants

Routine testing of antibiotics for potency, sterility, safety and pyrogens; was continued. Research on "The Effect of Combinations of Antibiotics in vivo and in vitro" was carried out and a scientific article pertaining to it was published in the Journal of Laboratory and Clinical Medicine. Constant research is being conducted in assay methods for the newer types of antibiotics.

Studies on the stability of Penicillin, Streptomycin, etc., are continuing. It is expected that, as a result of these experiments, a change will be made in the Regulations in the Food and Drugs Act regarding expiration times of a number of antibiotics.

SECTION OF BACTERIOLOGY

This section was formerly the "Bacteriology and Immunology Section", but during the year, as a result of reorganization in the Laboratory of Hygiene, this section was separated into its two main components—"Bacteriology" and "Immunology"—and the Immunology Section was combined with the Antibiotics Section to form the new "Biologics Control" Section.

All pre-existing services and responsibilities of the Section were maintained and some new ones added. For some time now it has been the hope that the Laboratory could take some active part in a study of hospital bacteriology, a phase of medical care which has been neglected. The Laboratory was fortunate in acquiring, during the year, the services of a well-qualified medical bacteriologist, to investigate this important problem. During September he was assigned to the bacteriology laboratory of the Ottawa Civic Hospital, where he could study the problem at first hand. During the six months that he has been there considerable assistance has been rendered not only to the director of the laboratories but also to the medical staff of the hospital. With the knowledge gained at this hospital it is hoped that similar assistance in this field can be given to other hospitals in the country at large and a program developed for the general improvement of hospital laboratory procedure.

Enteric Bacteriology

In this—the major field of activity in the section—the following phases of work were continued:

(1) The operation and maintenance of the National Salmonella Typing and Reference Centre:

A total of 472 cultures were received for identification from eight of the provincial laboratories, D.V.A. hospitals and other sources. This was nine more than last year, but only 355 were members of the Salmonella genus (49 fewer than last year). Twenty-eight different types of Salmonella were identified and, as found in previous years, the commonest types were S. typhimurium, S. paratyphi B, S. typhi, S. oranienburg and S. newport. No new types were discovered during the year. Salmonella montreal, described as a new type by this Laboratory last year, has been replaced by Salmonella wien since the latter name was deemed by the International Committee on Nomenclature to hold priority. Details of the individual types, and of their epidemiologic and clinical significance, were reported in full to the Technical Advisory Committee on Public Health Laboratory Services at its annual meeting in Ottawa in December.

There was an outbreak of paratyphoid fever in a fishing camp of about 110 persons at Gros Cap, N.W.T., in August, involving some 14 persons. The Department was asked to co-operate in the investigation of this outbreak and the laboratory received 211 stool specimens for bacteriological examination. S. paratyphi B was isolated from the stools of five of these cases. A new technique for stool collection ("Blotting paper technique" of L. K. Joe) was carried out in parallel with the usual glycerol-saline method. The new method, which is simple and cheap, compared very favourably with the accepted method.

Last year this Department investigated an outbreak of paratyphoid B infection at Fort Smith, Alberta. There was some evidence that a carrier or carriers from this earlier outbreak caused the outbreak at Gros Cap. Thirteen cultures from the Fort Smith outbreak proved to be of the same phage-type as that of the Gros Cap Strain, viz. phage-type 1. The usefulness of Salmonella typing is well demonstrated in these outbreaks, for proper laboratory follow-up cultures on the Fort Smith carriers might have prevented the Gros Cap outbreak.

(2) The establishment of the National Shigella Typing and Reference Centre:

In last year's report the hope was expressed that this Centre might be able to offer a complete Shigella (dysentery bacilli) typing service to the provinces similar to the Salmonella typing service. The Laboratory was able to offer this service to the provinces at the annual meeting of the laboratory directors in December. Grateful acknowledgement is made of the assistance given in establishing this service by Dr. W. H. Ewing of the U.S.P.H.S., Chamblee, Georgia. Seventy cultures of Shigellae and two of Alkalescens-Dispar group received at the laboratory were successfully typed. Shigella sonnei was the commonest type found.

(3) The preparation and distribution of standardized antigens:

The demand by the provinces for standard antigens increased again during the year. During this year a total of 276,765 ml. of standard antigens were supplied, almost 74 litres more than were distributed during 1950-51. All the

provinces, with the exception of Ontario, are now using the Laboratory's antigens. There is a constant increase in the demand for the glycerolated Vi antigen used in the detection of the typhoid carrier state.

(4) The preparation and distribution of diagnostic antisera:

To assist in the rapid identification of enteric pathogens at the provincial level, the Laboratory continued to suppy Samonella polyvalent and grouping sera. The laboratory directors requested that it also prepare for them diagnostic sera for identification of the common types of Salmonella. This was done and the Laboratory is now distributing 8 diagnostic H sera which allows the provincial workers to identify all the types most commonly found in Canada. In addition, the Laboratory is now also supplying polyvalent Shigella antisera. As a result, this year 724 ml, of diagnostic antisera were distributed, almost twice as much as in 1950-51.

(5) Special Problems:

Methods of standardization in testing the agglutinability of Salmonella antigens have been improved. Research is presently being carried out on preservatives used in the lyophilization of standard antisera. Preliminary observations indicate that a preservative is required in order to maintain the level of agglutinins in the dried antisera.

Food and Sanitary Bacteriology

The Foods and Sanitation Subsection has provided control services to the Food and Drug and Public Health Engineering Divisions, and has conducted a number of bacteriological surveys and research projects. The activities conducted in this rather diversified field are summarized below.

(1) Bacteriological Control of Shellfish-Producing Areas in the Eastern Maritime Provinces:

Control of shellfish producing areas is largely a co-operative effort on the part of the Laboratory of Hygiene and the Division of Public Health Engineering of the Department and the Department of Fisheries. The new Mobile Laboratory carried out a routine bacteriological survey program recommended by the Interdepartmental Shellfish Committee; ten surveys in Prince Edward Island and Nova Scotia were completed during the year. A total of 2,655 water samples and 19 oyster samples were analysed in the course of three surveys.

(2) Shellfish Toxicity Control:

The 1950-51 scheme for the routine control of toxicity in clams and mussels was again followed in 1951-52, and provided effective control. A total of 294 shellfish extracts from New Brunswick, Nova Scotia, Newfoundland, and Quebec were received during the year for toxicity testing; the toxicity levels were, in general, very low and thus permitted a greater use of the producing beds. One hundred and thirty-two specimens of canned clams were received from packers in New Brunswick; in all cases these packs proved to be non-toxic.

(3) Bacteriological Control of American Imported Shucked Oysters:

A bacteriological survey of shucked market oysters imported from the United States was continued. During a research study conducted in Montreal during November, 288 specimens of shucked American oysters were analyzed; in addition, three replicate samples from each of 80 specimens of oysters from the

Montreal market were examined at the Laboratory of Hygiene. Data obtained from these tests indicate that the bacteriological standards for the grading and acceptance of shucked oysters, tentatively adopted last year, are quite satisfactory.

(4) The Bacteriological Examination:

The bacteriological examination of pharmaceutical gelatin and agar-agar for the Food and Drug Divisions was continued. Ninety-one water samples were examined bacteriologically for the Public Health Engineering Division. One hundred and twenty-two water samples were tested for other agencies.

(5) Milk Survey, Prince Edward Island:

One of the important functions that this laboratory can perform for the provinces is a mobile laboratory service for the surveying of milk and water supplies, restaurant sanitation, etc. A comprehensive survey of raw and pasteurized milk supplies on Prince Edward Island was conducted in co-operation with the provincial Department of Health and Welfare; 680 samples of milk and 65 milk utensils were examined bacteriologically during the survey. The resulting data indicates that a very marked improvement in the sanitary quality of milk supplies on P.E.I. had taken place since the first co-operative survey was made in 1946.

(6) Restaurant Surveys:

In response to a request from Prince Edward Island, a survey was conducted during the Spring of bacteriological and sanitary conditions in the restaurants throughout the province. Five hundred and eighty utensils used in the serving and preparation of foods in all 48 restaurants that were open at the time of the survey, together with 58 samples of dishwater and drinking water from these same establishments, were examined bacteriologically.

A preliminary survey of the bacteriological and sanitary conditions in Government building cafeterias in Ottawa was conducted during February and March. One hundred and fifty-four utensils used in the serving and preparation of food in six establishments were examined bacteriologically.

(7) Identification of Meat by the Precipitin Test:

Considerable interest in the détection of the illegal sale of horsemeat labelled as beef has been maintained in 1951-52. As a result, 380 specimens of suspected meats have been submitted by the Food and Drug Divisions and various municipal agencies for identification; 42 specimens (11 per cent) of the submitted samples, contained horsemeat in contravention of the Food and Drugs Act. As a result of these tests and the evidence of its technical staff, the Department was successful in prosecuting a number of vendors for the illegal sale of horsemeat.

During the year considerable amounts of antisera for the specific detection of horsemeat, beef, and other meats were prepared in this laboratory. It has been possible to supply a number of interested laboratories with small amounts of antisera upon request.

Numerous methods for the extraction of antigen were investigated; in all cases they proved to be too slow and cumbersome for the processing of large numbers of specimens for routine identification. An improved method which allows for easy extraction of the antigen and rapid completion of the precipitin test has been developed; it is now possible to obtain a completed test within one hour, compared to a minimum of 24 hours using the involved procedures previously recommended.

(8) Freeze-drying of Biological Material:

The Edwards Freeze-Drier has been operated almost continually for the lyophilization of bacterial cultures, antigens, and other biological materials; 15,769 ampoules were processed during the year.

Hemolytic Streptococcus and C. Diphtheriae

The Laboratory continued its "typing service" of hemolytic streptococci and diphtheria bacilli to the provinces. 626 ml. of Lancefield grouping sera (rabbit) for hemolytic streptococci were distributed during the year. This was 200 ml. more than during 1950-51. Collaboration with the Sick Children's Hospital, Toronto, in a study of rheumatic heart disease was continued and 302 sera (from 66 patients) were tested for streptolysin O antibodies (ASO).

A comparison of Elek's medium and of Frobisher's modification of it for the in-vitro virulence testing of cultures of *C. diphtheriae* was continued. The two media compared favourably but the tests were sharper and easier to read on the Elek medium. This test would have a very real usefulness in the public health or hospital laboratory if dehydrated media and reagents were readily available. Difco has been attempting to prepare such reagents and the laboratory has been co-operating with them in testing their different experimental lots. So far, no satisfactory "dried" product has yet been prepared but it is hoped that the project will be continued.

Non-specific Urethritis

The R.C.A.F. (Rockcliffe) asked assistance in investigating cases of nonspecific urethritis. Bacteriological studies were restricted to the search for pleuropneumonia-like organisms (PPLO) and gonococci.

Parasitology

The Laboratory seeks to give assistance to the provinces in this field of work, by supplying antigens for diagnostic purposes, by examining and reporting on "difficult" specimens, and by the provision of specially prepared slides of interesting parasitological material for teaching and instructive purposes. There were 87 requests for antigens, from the provincial laboratories and D.V.A. One hundred and two human fecal samples were submitted from the provincial laboratories, D.V.A. laboratories, Armed Services and local hospital laboratories for critical diagnosis. A number of E. histolytica cases were isolated along with a variety of Helminth ova and adult worms. Trichinosis studies have been continued and a paper "Prevalence of Human Trichinosis in Canada" is now being prepared for publication. From the western branch of the Laboratory, Kamloops, 57 specimens of human diaphragm material were forwarded for investigation and four positive specimens (for Trichinella) were identified. The investigation of Trichina in wild rodents was concluded with the examination of over 2,000 animals and a paper "A Survey of the Incidence of Trichinosis in Rats in B.C." is now in press.

A number of pressing parasitological problems await investigation. Trichinosis in humans, hydatid cyst and the internal parasites affecting man in northern Canada, evaluation studies of parasitological performance in provincial laboratories (requested by the laboratory directors at their last annual meeting), the danger of army personnel returning from Korea in spreading parasitic diseases so common in that part of the world, are examples of problems that need to be investigated.

SECTION OF SEROLOGY AND CLINICAL CHEMISTRY

The preparation and distribution of standard reagents (antigens, complement, hemolysin) to Provincial Public Health Laboratories have been continued in an effort to ensure Dominion-wide uniformity in the blood tests for syphilis.

In order to determine the effectiveness of the program serological evaluation studies are conducted every second year. The results of the fifth study have been compiled and analysed and summaries have been sent to the participating laboratories.

During the past year the Section participated in an international exchange of blood specimens. When the results have been summarized at Geneva it will be possible to gain some idea of the efficiencies of blood tests for syphilis in Canada on the basis of results obtained in other countries.

As a part of the research program of this division studies are being conducted in collaboration with the Banting Institute, University of Toronto, in an effort to develop a synthetic antigen for the diagnosis of syphilis. It is felt that a synthetic antigen would be more uniform from batch to batch than the present antigens which are extracted from animal tissue. Another project has been the clinical evaluation of certain cardiolipin antigens used in the Kolmer-Wassermann test. This work was summarized in a paper presented at the annual meeting of the Canadian Public Health Association and will be published shortly.

Research in clinical chemistry has been continued in the branch laboratory located in the Ottawa Civic Hospital. Emphasis has been placed upon the evaluation of some of the clinical procedures which are used more commonly in hospital laboratories. Quantitative methods for the determination of glucose, non-protein nitrogen, creatinine, sodium, potassium and chlorides in the blood have been investigated. The various tests used in the qualitative examination of urine specimens have been studied intensively.

With the help of the director of one of the Provincial Public Health Laboratories, arrangements have been made to evaluate the accuracy of blood glucose determinations as carried out in the hospital laboratories of that province.

WESTERN BRANCH, KAMLOOPS, B.C.

This laboratory operates as an adjuvant to the various health services of the Dominion. Special diagnostic services, for which the laboratory is equipped, are available to other laboratories and certain diagnostic antigens are prepared and supplied gratis to provincial and D.V.A. laboratories as requested.

During the year 492 biological and serological tests were carried out, and 105,050 cc. of standardized antigens were supplied—sufficient to carry out some 33,000 diagnostic tests.

The survey initiated last year in co-operation with Indian Health Services to determine the incidence of tularemia in western Indians was continued and during the year serological tests were carried out on 362 patients. Of these, 14 gave reactions highly suggestive of *P. tularensis* infection.

Investigations relating to tick-, insect- and rodent-borne diseases have been pursued in co-operation with the Provincial Departments of Health of British Columbia, Alberta and Saskatchewan, and attempts made to locate foci of infection from which control measures could be directed. The field, or specimen collecting, crews were provided by the provinces and each crew's activity was directed by its respective health department.

In Alberta and Saskatchewan the ordinarily short collecting season was made still shorter by the unusually heavy rains of 1951 and the number of specimens collected was somewhat less than in previous years. In December, the British Columbia Health Department discontinued the year-round rodent survey previously carried on and arranged instead that the City of Vancouver make only periodic surveys of certain areas. This led to a further reduction in the number of routine specimens being submitted to the laboratory. However, just under 14,000 specimens were collected, including 83 trapped and shipped to the laboratory alive for special studies relating to leptospirosis.

The examination of specimens for plague (Pasteurella pestis) and for Rocky Mountain spotted fever gave entirely negative results. One specimen of wood ticks (Dermacentor andersoni) submitted from south of Shaunavon, Sask., proved positive for P. tularensis, indicating that cases of tularemia might occur in that area.

Cursory taxonomic examinations were made of the ectoparasites submitted from the rodents collected in the coastal region of British Columbia and records were kept of the species of flea encountered with a view to recording the distribution of *Xenopsylla cheopis*, the classical plague vector. The total rat flea count for the year was low. In British Columbia it was approximately one flea to every three rats. In Saskatchewan the index was nil; no fleas having been submitted from the 71 rats taken in that province.

The study initiated a few years ago in connection with leptospirosis was continued as opportunity afforded. Eighty-three live rats submitted from various points in British Columbia were examined for evidence of this infection, in addition to the usual tests for plague. Leptospirae were recovered from one of this group. The leptospirae found in this instance proved, on microscopical appearance and on virulence tests—as did those isolated during the previous year—to be similar to the classical rat strain, *L. icterohemorrhagiae*, but, on serological tests they differed from the stock strains maintained in the laboratory. In view of this observation, subcultures were submitted for identification to the Army Medical Center, Washington, D.C. There, it was found that these strains were identical with *L. ballum* strains—a new serological type isolated in Denmark in 1944 and later recovered from human cases of leptospirosis in Cuba, but, hitherto not found on this continent. Studies on the organism are being continued and a paper recording the findings is in the course of preparation.

In the past, rat bite fever infection (Spirillum minus) had been encountered repeatedly in commensal rats in British Columbia. Of the 96 rat tissue pools (295 rats) examined this year for evidence of plague, none were found infected with Sp. minus but, of the 83 live rodents, 12 (14.5 per cent) proved positive—a striking example of the mortality of the infectious agent in dead tissues.

Of academic interest in the examination of rodents for plague was the rather high percentage of cysticerci and capillaria infestations encountered, (Taenia fasciolaris—the larval form of the cat tapeworm Taenia taeniaeformis, and Capillaria hepatica). Of the 378 rats examined during the year 121 (32 per cent) harbored cysticerci—from 1 to 6 per animal, an average of 1·6—and 21 (5·5 per cent) showed masses of capillaria ova in the livers.

TECHNICAL ADVISORY COMMITTEE ON PUBLIC HEALTH LABORATORY SERVICES

The seventh annual meeting of this committee was held in Ottawa in December 1951. The directors of all the provincial laboratories were present and two members representing the Departments of Veterans Affairs and National Defence. Dr. E. B. Schoenbach, Professor of Medicine, State University of New York, and director of Medical Services, Maimonides Hospital of Brooklyn, New York, was a special guest. The business of the first day was devoted almost wholly to a discussion of "Antibiotics". Dr. Shoenbach delivered an address in the morning at the Ottawa Civic Hospital on the "Clinical Use and Misuse of Antibiotics" to a joint meeting of the Technical Advisory Committee and the medical staff of the Civic Hospital. In the afternoon he gave a lecture on the "Laboratory Aspects of Antibiotics" to the committee and took part in a lengthy discussion on the methods of testing the sensitivity of microorganisms to antibiotics and the relationship of laboratory to clinical results.

Rh testing of blood was discussed and a resolution recommending that the local blood transfusion services should be considered as the agencies best suited to deal with the laboratory problems involved in the testing of blood.

The Committee appointed a special sub-committee to study the costs of laboratory services and recommended that any national scheme for furnishing free laboratory services should be held in abeyance until this special sub-committee had completed its investigation and its report had been studied.

Special reports were submitted by the Registrar of the Tumour Registry and by the officers-in-charge of the sections of bacteriology, syphillis serology and clinical laboratory services, and of virus research, on the activities of their respective sections. It was agreed that another syphilis serology evaluation survey should be carried out in 1952 and that the Laboratory of Hygiene should also conduct a special evaluation study of the methods used and the proficiency of the staff in the provincial laboratories in detecting E. histolytica in stools.

The Committee approved the Laboratory of Hygiene as the National Shigella Reference and Typing Centre. The Laboratory of Hygiene was requested to organize three refresher training courses for laboratory personnel during the coming year—Enteric Bacteriology, Mycology and Syphilis Serology. In addition, discrepancies between Kahn and Complement Fixation tests, the training of laboratory technicians, echinococcus (hydatid) infection in B.C., the classification of laboratory workers, the presence of tubercle bacilli in sputum (as shown by culture) in the absence of clinical tuberculosis, virus studies at the provincial level, laboratory-acquired infections, and the laboratory in civil defence, were among the more important topics discussed at the meeting.

CANADIAN TUMOUR REGISTRY

In the period between the April 1, 1951 and March 31, 1952, 205 tumours were registered. These were contributed by 36 pathologists throughout Canada.

During the past year 73 tumours have been reported on by the Registry's Consultants, whose invaluable services are acknowledged.

Requests for "follow-up" information on 344 cases have been sent out and 231 replies have been received.

A study set of female genital tract tumours has been prepared consisting of 56 slides. It is not comprehensive but an attempt has been made to present the majority of the commoner, and a number of the rarer, gynecological tumours. As time goes on cases will be added to the set. Accompanying each set is a loose-leaf book of case protocols. Each protocol includes a synopsis of the clinical history, and a note on the gross and microscopical pathology. When indicated, a paragraph headed "Comment" has been added, covering points of special interest. Follow-up information will be added to the case reports

from time to time. A study set has been sent to the Professors of Pathology at each of the Canadian universities on an indefinite loan. A letter has been sent to members of the Canadian Association of Pathologists informing them that these loan sets are available on request.

The preparation of study sets of dermal tumours and tumours of bones and joints is now under way and other sets will follow.

PUBLIC HEALTH RESEARCH

Scientific and technical research, inherent in its service programs, continued this year as an important part of the Department's activities. Detail of such work is contained in this Report in sections dealing with Public Health Laboratory Services, the Food and Drug Divisions, Industrial Health, and with such divisions as Nutrition, Dental Health, Epidemiology, etc.

The National Health Program, as indicated in reports of the various fields supported by grants under the Program, contributed to research projects all over Canada.

Research in the socio-economic field went forward at an accelerated rate on many projects. These are carried out mainly by the Research Division, whose activities are reflected throughout this Report, as well as in the summary of this Division's work in the section dealing with the Administration Branch.

Research in hospital and medical care insurance programs were carried out in the Health Insurance Studies Division, and are reported in the section of this Report on Surveys and Planning.

SURVEYS AND PLANNING

CANADIAN SICKNESS SURVEY

Results began to be apparent during the year from the nation-wide sickness survey, begun in the autumn of 1950 and designed to make a general assessment of the amount and nature of illness in Canada. This sampling study, closely associated with the provincial health surveys, and carried out with the assistance of the National Health Program, aimed at determining the health needs of Canadians more accurately than had been possible previously.

The planning and tabulation of these results is being carried forward jointly by the Epidemiology and Research Divisions and the Directorate of Health Insurance Studies, in collaboration with the Dominion Bureau of Statistics, and the desired picture of actual conditions is gradually being built up.

As a result of the Sickness Survey an unparalleled set of records of individuals' illnesses has become available and it is expected that findings arising from them, when tabulation and analysis is completed some time in the Fall of 1952, will contribute in great measure to the development of services to provide even better health care for Canadians.

NATIONAL HEALTH SURVEY

Seven provinces have completed surveys of their health facilities and services in accordance with a plan to make an overall appraisal of needs to serve as a guide in future development of health programs. These surveys were in fulfilment of a basic purpose of the National Health Grant Program, which financed them.

Using the surveys received from the provinces, the Department's Research Division began work towards the end of the year on the compilation of a comprehensive nation-wide report on personnel, health services and hospital facilities in Canada, to be known as the "National Health Survey Report". In this connection, studies were under way on mental health services, tuberculosis control, cancer control, dental health services, laboratory services and local health services, as well as on personnel and hospital facilities generally.

Conditions under which Grants were provided for this survey in the National Health Program and the fields to be studied by the provinces were detailed in the Annual Report of the Department for the fiscal year ended March 31, 1951.

It was apparent, by the end of this fiscal year, that these provincial health surveys would make possible the compilation of the first detailed overall assessment of Canada's health facilities and services.

HEALTH INSURANCE STUDIES

Departmental studies of prepaid hospital and medical care programs are the responsibility of the Directorate of Health Insurance Studies, with the assistance of the Research Division. During the year, the Director of Health Insurance Studies visited a number of countries to observe the operation of their programs. The Research Division undertook publication of a series of bulletins on health insurance in selected countries. "Health Insurance in Sweden" was printed and earlier bulletins on programs in Denmark and New Zealand were revised. Draft bulletins were also prepared on Health Insurance in Norway, the Netherlands and Great Britain (1911-1948). The Director of Health Insurance Studies also participated in the meeting of the Select Committee on Public Health Administration of the World Health Organization.

Officers of the Department have kept in close touch with health care developments in the United States, through personal visits and membership on the subcommittee on Medical Care of the American Public Health Association. In addition, close attention has been paid to the work of the Health Insurance Plan of Greater New York.

The Department has also compiled information concerning a number of health care programs in different provinces of Canada. Hospital insurance plans in British Columbia and Saskatchewan, medical and hospital care in the Cottage Hospital districts of Newfoundland and the medical care programs in Alberta and Manitoba, were examined from the points of view of financing arrangements, administrative techniques, population covered and benefits offered.

Cost and utilization data concerning medical care provided to recipients of social assistance in various provinces were collected. Further information was gathered from voluntary medical and hospital prepayment plans, whose activities are continually expanding. Meanwhile, work on tabulation of the Sickness Survey and of the provincial health survey reports, is expected to provide extremely valuable information for the long-term planning of health insurance in Canada.

REHABILITATION OF DISABLED PERSONS

Progress was made during the year in the implementation of some of the recommendations of the National Conference on the Rehabilitation of Disabled Persons, to which reference was made in last year's Annual Report.

The National Advisory Committee on the Rehabilitation of Disabled Persons was set up by Order-in-Council in December, 1951. The membership of the Committee is substantially the same as that suggested by the Conference: representatives of federal and provincial governments, of organized labour and employers, of voluntary health and welfare organizations, the medical profession and the universities, in addition to a few individuals with special knowledge and interest in the field.

The Committee's terms of reference are wide, including the duty and power "to advise on the subject of rehabilitation policies generally, whether in relation to government action or the activities of voluntary agencies". In addition, the Committee is to "consider and advise upon such questions relating to handicapped persons as may, from time to time, be referred to it".

First meeting of the Advisory Committee was held in Ottawa early in February. The proceedings were opened by the Prime Minister and the Ministers of the three sponsoring departments, Labor, Veterans Affairs and National Health and Welfare, welcomed the Assembly. After three days' deliberations, the Committee passed a number of resolutions dealing with priorities, personnel, vocational training and placement. The Committee recommended the establishment of a rehabilitation grant and suggested that a study be made of existing grants, in order to assess the extent to which they are being, or could be, used in meeting rehabilitation needs. The Federal Government assured the Committee of its intention of appointing a federal co-ordinator for rehabilitation as expeditiously as possible.

III. HOSPITAL AND MEDICAL SERVICES

INDIAN HEALTH SERVICES

The 80 health centres of Indian Health Services are strategically placed to serve the main groups of the 136,500 Indians and 9,300 Eskimos throughout Canada's provinces and north beyond the Arctic Circle. In 1951 some 30 of these health centres contained nursing beds to which short-term sick and obstetrical patients were admitted. Each nursing station was staffed by a graduate nurse and nurse's aide with caretaker assistance as required. The remainder of the health centres were dispensaries where medical officers or graduate nurses administered to the sick and reached out to provide public health care and search for incipient illness, particularly tuberculosis, which is still the major scourge of the Indians and Eskimos in this country.

Supporting the health centres is a network of 18 departmental hospitals. The larger of these are, in the main, sanatoria for the treatment of tuberculosis, but all—and especially the smaller hospitals—serve as community treatment centres providing all the facilities of modern community hospitals.

Public health education and practice has been the keynote of Indian Health Services, the avowed purpose being to forestall disease or detect it in the earliest stages. Emphasis has been placed on educational information for the Indians and Eskimos, immunization procedures and extensive surveys for early case-finding. Where protective efforts have failed to prevent illness, the patients have been either admitted to departmental treatment facilities or arrangements made for care by the professional and hospital services in the communities close by the patients' homes. Indian Health Services has endeavoured to ensure for Indians and Eskimos the highest quality of attention which can be provided, notwithstanding the wide dispersion and high degree of isolation of many of these peoples.

Health Education

On the principle that good health habits constitute the best insurance against disease, a steady drive has been maintained to raise the health consciousness of the Indians and Eskimos by exhibiting appropriate films, film strips and posters accompanied by instructive talks from the medical officers and nurses of the field staff. These messages must often be passed through an interpreter and hence must be built around fundamental principles. The publication "Good Health for Canada's Indians" has continued to be enthusiastically received by the Indians and required reprinting again during the year. A new edition of "The Book of Wisdom" for the Eskimos has been further developed. The film strip "The Starlight Story", depicting the onset, treatment and recovery of a case of tuberculosis, was completed and distributed during the year. It has received acclaim and has been in a demand even beyond Indian and Eskimo circles.

Protective Procedures

A determined effort is made to protect every child against the common communicable diseases through preventive inoculations. The goal is not easy to attain because of the isolation of some groups and the nomadic habits of many, making proper serial inoculations and checking exceedingly difficult. It can be stated with confidence, however, that the Indians are at least as well

protected as their neighbours while the small Eskimo groups, although not as fully protected, are less frequently exposed to communicable disease. Indian Health Services has been active in using the Bacillus-Calmette-Guerin vaccine as a protection against tuberculosis. Some 4,600 inoculations of this material were given by departmental officers during 1951 with additional numbers inoculated in community hospitals where this vaccination is regularly given each Indian baby.

Case-Finding

Because of the value of early diagnosis, particular emphasis has been placed on case-finding procedures. The use of diagnostic chest X-rays on admissions to departmental and community hospitals has been encouraged and, in addition, a very intensive survey program has been in effect each summer. A larger number of Indians and Eskimos can be reached in this interval between the active trapping seasons, when the annual official visits are made to those Indian bands which receive Treaty payments and the Eskimos congregate on the occasion of the arrival in the North of the annual supply vessels.

There were 16 departmental survey teams in operation in the summer of 1951, and, in addition, survey work was carried out by a medical party on the Eastern Arctic Patrol vessel and by a survey party in the western Arctic using aeroplane transportation. In all, some 40,024 X-ray plates were taken during the year. The surveys were not limited to the investigation of chest disease, departmental officers being alert for indications of other illnesses. Nor was this service restricted to Indians and Eskimos since, where provincial or other case-finding agencies do not ordinarily reach, the facilities of Indian Health Services have been extended to the whole population in the interests of public health.

While this case-finding goes on each year and a large proportion of the Indian and Eskimo population has been examined repeatedly, there is a proportion of reluctant individuals, as in any population. Gentle persuasion is used to encourage attendance at the clinics but no attempt at compulsion has been used. Undoubtedly many instances of active disease thus escape detection.

Properly included under the protective procedures is the work of the eight full-time dental surgeons. They have concentrated on dental care for children of school age, making regular visits to residential and day schools to promote hygienic habits and to provide essential treatment so that the young adults may commence life with reasonably healthy mouths. Fluoridine prophylactic treatment has been given in some areas, with encouraging results. Aside from its preventive aspect, the dental service has been confined to the relief of pain and the provision of dentures for medical reasons.

Active Treatment

The Indian Health Services' 30 nursing stations have 158 beds. The 18 departmental hospitals have a rated capacity of 2,163 beds but regularly the beds set up have exceeded the rated capacity. There has been a large waiting list for admission to the sanatoria and every foot of space has been utilized to the maximum. Some 8,000 patients were admitted to departmental hospitals during 1951 and 675,000 days of treatment provided. Of these just over 25 per cent of admissions, but 85 per cent of treatment days, were for tuberculosis. General cases remained on an average of 17 days but tuberculosis cases remain very much longer. Generally, 75 per cent of the departmental hospital beds are occupied by tuberculous patients.

In addition to those attended in Indian Health Services hospitals some 25,750 persons were admitted to community hospitals for a total of over 775,000 patient days. Although the majority of patients admitted to non-departmental hospitals are for general medical and surgical disorders, still 40 per cent of these patient-days were for treatment of tuberculosis and 14 per cent of non-departmental hospital-days were for mental illness. The departmental sanatoria are in the more western provinces. Indian and Eskimo patients are admitted to community institutions in the east and in the Northwest Territories. The mentally ill are admitted to provincial institutions.

Of the 1,452,886 patient days of care provided during 1951, 849,729 were accounted for by tuberculous patients, 96,040 by the mentally ill and 507,117 by those with general medical and surgical disorders. This represents 5.8 days of hospitalization per capita on account of tuberculosis and 3.5 days per capita for general conditions. There was more than one admission to hospital for every five Indians and Eskimos living in the country.

While the 28 full-time field medical officers provided professional attention for the larger groups of Indians and Eskimos, an even greater volume of professional service has been provided through arrangements with parttime physicians and those rendering service on a fee basis. Accounts are regularly received from many hundreds of doctors and dentists in the communities near the smaller Indian groups. These, along with a host of qualified and lay persons who act as dispensers of the medical materials supplied to each group of Indians and Eskimos, have been very active partners in a service developed to provide, mostly gratuitously, comprehensive medical attention to persons of native status. It is not generally recognized that there is no obligation on the part of the federal government to provide this service except the moral responsibility of seeing that citizens do not suffer through callous neglect.

Field Nursing Service

The heart of the field service has been the graduate nurse force staffing the smaller hospitals, nursing stations and dispensaries where they are in most intimate contact with the everyday lives of the people and can do most to raise the level of health consciousness within the homes. Augmented by part-time graduates, provincial public health nursing services, the Red Cross Outpost nurses and the Victorian Order, they press the health educational program in homes and schools, assist in case-finding, search for contacts and assist in the rehabilitation of discharged patients. They have conducted clinics in child and maternal welfare, given instruction in first-aid and home-nursing and set forth in the most fearsome weather in every type of primitive conveyance to carry their skill and sympathy to the afflicted.

Some nurses are several hundred miles from the nearest professional guidance, and must rely on their own judgment and the radioed advice of the nearest departmental medical officer. The native peoples owe an incalculable debt to these intrepid women. The fruits of their labours are the recent increases in population through their influence on infant and maternal survival which has steadily improved over the years. What were once declining races now show a normal population increase of about 1½ per cent per year.

Tuberculosis

Although the incidence of tuberculosis among Indians and Eskimos is high in comparison with the rest of the population in Canada, it is similar to that in comparable groups of other countries. Over the past few years the tuberculosis death-rate among Indians and Eskimos has been reduced at a rate parallel to or better than that in the remainder of the population. In 1949 the rate was 399.6 per 100,000 but in 1950 it was sharply reduced to 298.8. The comparable figures for the whole population were 1949—30.4, and 1950—25.9.

The attack on the tuberculosis problem is made through vigorous case-finding, isolation in the homes or sanatoria and the most modern medical and surgical procedures. Extensive use is made of all proven antibiotics as adjuncts to the accepted principles of rest for all patients and surgery for those whose period in hospital can be shortened by this means. The 550-bed Charles Camsell Hospital at Edmonton carried out 175 major chest operations during 1951. Similar work went on at other departmental institutions or in non-departmental hospitals.

All field nurses and certain particularly-experienced supervisors keep discharged patients under observation at home to guide rehabilitation and obviate relapse.

Extension of Services

During 1951 some 68 treatment beds were added through alterations made to existing facilities and the completion of a 28-bed hospital at Hobbema, Alberta. Health centres with beds were brought into operation at Lansdowne House and Pikangikum in northwestern Ontario and Rupert's House on James Bay in Quebec. Dispenseries were completed at Christian Island in Ontario; Seven Islands, Quebec; and Shubenacadie, Nova Scotia.

There was an addition of two medical officers, bringing the total of full-time medical officers to 65. Also four field nurses were added, for a total of 94. There were some 181 nurses regularly employed in departmental hospitals.

During the summer months 25 senior medical students were employed to assist in case-finding procedures and in the larger hospitals.

Co-operation with Other Agencies

It is considered essential for the social well-being of the Indians and Eskimos that the health program for them be identical with and, so far as possible, integrated with that of their neighbours. Every opportunity was taken to use provincial public health facilities on a reciprocal basis. Provincial health regulations guided public health procedures; provincial health insurance, such as the British Columbia Hospital Insurance Service, continued to be used where available.

Indian Health Services enjoyed extensive assistance from federal government agencies such as Department of National Defence treatment and air transport services, the Royal Canadian Mounted Police, and the Signal Services of the Departments of National Defence and Transport. Close co-operation existed between the officers of Indian Health Services, the Indian Affairs Branch of the Department of Citizenship and Immigration responsible for the welfare of Indians, and those of the Northern Administration and Lands Branch of the Department of Resources and Development which administers Eskimo affairs. Administration officers regularly acted as local public health officers while Indian Health Services provided the professional advice. The Director of Indian Health Services was officially appointed Chief Health Officer of the Northwest Territories.

As in the past, the goodwill of local practitioners, community hospitals and countless persons interested in Indians and Eskimos has contributed greatly to the success of the common endeavour on behalf of the health of these peoples.

LEPROSY

There are two institutions in Canada where lepers are hospitalized. Hospitalization and treatment of lepers in Canada is under the supervision of this Department.

The hospitals are located in Tracadie, N.B., and Bentinck Island, B.C. The former hospital is the Hotel Dieu de Saint-Joseph which has a twelve-bed wing for the exclusive treatment of lepers. This institution is assisted by a federal grant. The hospital at Bentinck Island is fully maintained and staffed by the Department.

Both institutions utilize the newer drugs available for the treatment of leprosy. These drugs are administered under close supervision and their results and reactions are closely observed.

Educational and recreational facilities are provided to all patients and each patient is encouraged to develop some hobby or handicraft.

During the year, two patients were admitted to Bentinck Island and one to Tracadie. There were no deaths in either institution. Two patients were discharged from Tracadie and one from Bentinck Island.

There are five patients remaining in the Tracadie hospital. Three show evidence of active leprosy in various stages. The other two are arrested cases but require permanent institutional care. Of the five patients, two are Acadians, two of Russian origin and one Chinese.

The three patients remaining at the Bentinck Island Hospital are Chinese.

Leprosaria—Annual Census

	Tracadie	Bentinck Island
Remaining from last year	6	2
Admitted during the year	1	2
Died during the year		0
Discharged during the year	2	1
Remaining in Hospital	5	3

SICK MARINERS SERVICE

Treatment of sick mariners on a prepaid basis has been provided at Canadian ports since 1867, under the authority of Part V of the Canada Shipping Act.

Medical care and hospitalization are provided for all crew members of foreign-going vessels arriving in Canada and for crews of coastwise vessels in the interprovincial trade. Canadian fishing and government vessels, if they desire, may take advantage of the Sick Mariners Service. The first payment of dues by fishing vessels must be made prior to their first voyage of the calendar year.

Medical care covers all conditions, with the exception of permanent insanity, up to a maximum of one year. The only dental care provided is the emergency extraction of teeth or extractions required to alleviate a concurrent medical condition.

Sick Mariners Dues are collected by Collectors of Customs on every ship arriving at any port in the provinces of Nova Scotia, Prince Edward Island, New Brunswick, Newfoundland, Quebec and British Columbia, and at ports on Hudson Bay and James Bay in the provinces of Ontario and Manitoba. The amount of dues collected is not sufficient to cover the cost of the services rendered. During the fiscal year 1951-52 the Sick Mariners Dues amounted to \$258,728. The cost of medical services provided amounted to \$595,049.

The method of granting authority for treatment is kept as simple as possible. The sick mariner applies to his captain for treatment. The captain completes a concise form indicating the necessary information about the crew member and his vessel and the dates that Sick Mariners Dues were paid. The seaman is then sent to the local Collector of Customs who verifies the facts and endorses the application, referring the patient to the Port Physician. In case of accident or emergency the seaman may be sent directly to the doctor or hospital for sick mariners.

Sick Mariners Clinics staffed by medical officers of the Department are located at Vancouver, Montreal, Quebec, Saint John, Halifax and Sydney. These clinics are conveniently located in close proximity to the waterfront. They are modern in all respects and have complete diagnostic and treatment facilities. At the ports of Victoria, Port Alberni and Powell River in British Columbia; Port Alfred and Gaspé in Quebec; Lunenburg, Windsor, Liverpool, Pictou, Digby, Lockeport and Yarmouth in Nova Scotia; and Shippegan in New Brunswick, sick mariners are treated by Port Physicians who are employed on a part-time salary based on the amount of work performed. In the smaller ports and fishing hamlets, there are Port Physicians who attend to sick mariners on a fee for service basis. Patients treated in the clinics operated by this Department in the current year numbered 7,853. Those treated by part-time salaried physicians numbered 4,248, and those treated by doctors on a fee-for-service basis numbered 11,214.

At the Sydney Marine Hospital, Indian and Eskimo patients are hospitalized for the Indian Health Services.

Details of sick mariners treatment in relation to vessels' dues and expenditures will be found in Table 15, page 137.

IV. EXAMINATION SERVICES

CIVIL AVIATION MEDICINE

The Division of Civil Aviation Medicine has continued to carry out its functions as medical adviser to the Department of Transport (Air Services) on physical standards for aviation personnel and also to act in an advisory capacity to the Department of Transport, other government departments, interested organizations and the public generally, on the health, safety and comfort of aircrew, groundcrew and passengers by air.

In the first instance the Division advises the Superintendent of Air Regulations, Civil Aviation Division, in regard to the physical fitness of pilot applicants, licensed pilots, flight navigators and air traffic controllers, and the Chief Inspector of Radio, Telecommunications Division, in regard to flight radio operators. During the year, medical examination reports for approximately 10,163 pilots, 193 air traffic controllers, 31 flight radio operators and 39 flight navigators were assessed. A total of 1,115 electro-cardiograms of commercial and transport pilots were evaluated. The interim report of an audiometric survey of 510 licensed commercial and transport pilots was submitted to the Division.

To maintain a high standard in the reporting of the medical examinations, the Division administers an aviation medical examiner service, through personal contact with the examiners and by keeping them informed of advances and trends in aviation medicine through regional meetings or attendance at courses held at the Institute of Aviation Medicine, R.C.A.F. Station, Toronto. There are 269 civil aviation medical examiners approved by the Department of Transport, 33 of whom are newly appointed. These examiners are licensed physicians with an interest in or knowledge of civil aviation medicine.

Regional Boards

Five Regional Medical Consultant Boards functioned during the year and reviewed approximately 30 cases. Eight special cases were examined by consultants on a fee-for-service basis. The Boards were established to aid in rendering a fair assessment of borderline or contentious cases, especially for the commercially-licensed pilots.

Air Safety

Since civil aviation medicine is concerned with safety and since there is a marked trend in civil aviation to emphasize prevention, the Division is being requested with increasing frequency to study and advise on the preventive aspects of safety in air travel. An example of this work is the notable progress being achieved in crash injury investigation and reporting, with recommendations being made in regard to the design of the aircraft, the use of rear-facing seats and a satisfactory type of safety belt or harness.

During the year investigation has continued in the following subjects associated with aviation medicine: emergency means of meeting explosive decompression at high altitudes; psychological studies aimed at improving commercial and transport pilot selection; degree of hearing loss and cause of the hearing loss as evidenced by personnel licensed by the Department of Transport to fly commercially; high altitude aerial photography in unpressurized aircraft; crash injury reporting; color perception requirements for commercial

and private pilots. In an effort to improve the facilities for color perception testing, thirteen color perception lanterns have been obtained from the manufacturer and are being distributed to aviation medical examiners across the country.

Co-operative Services

Liaison with the International Civil Aviation Organization, the R.C.A.F. and the Air Cadet League of Canada has continued. A total of 470 medical examination reports for the flying training program under the terms of reference of the R.C.A.F. "Exercise Chipmunk" and approximately 1,000 medical examination reports for the scholarship flying training program sponsored by the R.C.A.F. and the Air Cadet League of Canada, were assessed to the medical standards of the R.C.A.F. and the Department of Transport. The facilities and staff of the Institute of Aviation Medicine, R.C.A.F. Station, Toronto, have made a valuable contribution to this whole field by providing instruction for civilian pilots engaged in high altitude flying, by assisting in the special investigations required by borderline clinical cases, and by advising the Division generally in problems associated with aviation medicine.

CIVIL SERVICE HEALTH

The Civil Service Health Division has continued to discharge its responsibility for the conservation and promotion of the health of federal government employees. There were no fundamental changes in the functions, activities, or basic policies of the Division during the past year.

The advisory, diagnostic, and emergency medical care facilities of the Health Centre in Ottawa have worked to full capacity. No additional Health Units were opened. The 17 Health Units previously established, and staffed by 38 nursing counsellors, continued to provide a complete health-counselling service to some 20,000 civil servants. In addition, there has been an appreciable increase in the requests from smaller isolated groups not directly served by the Health Units for occasional or periodic visits by the nursing counsellors and other professional staff to discuss local problems and advise on urgent cases.

Statistical data on sickness absenteeism in the Civil Service, available from all Certificates of Disability For Duty, is collected and coded in the Certificate Review Section by the Public Health Section of the Dominion Bureau of Statistics. The material is analyzed by the Bureau and forms the basis of an Annual Statistical Report on "Illness in the Civil Service".

In the administration of its services, the division has worked closely with other departments of government and with other divisions of the Department. For medical examinations and consultations the division has called freely upon the facilities of the Department of Veterans Affairs, and within this Department on the Divisions of Quarantine, Immigration Medical and Sick Mariners Service. The Industrial Health Division and the Public Health Engineering Division have assisted in the investigation and improvement of working conditions, and the Nutrition Division in the investigation of nutritional problems.

Senior officers of the Division have also participated in various extra-divisional activities. The Chief Supervisor of Nursing Counsellors has continued in her capacity as the Department's Consultant in Nursing. The Chief of the Division, the Assistant Chief, and the Chief Supervisor of Nursing Counsellors, have taken part in the planning and organization of civil defence.

The Departments of Trade and Commerce and External Affairs, concerned about the health of their overseas staffs, made representations concerning both the physical fitness and emotional stability of personnel posted abroad or reassigned from one post to another. The division assumed the task of conducting regular medical examinations and assessing all such personnel whenever such examination was possible.

The Division was consulted concerning visual deterioration among employees of the Department of Mines and Technical Surveys engaged in topographical survey work. This work demands a high degree of visual acuity and depth perception. Careful study of this problem was made and an approved industrial visual screening apparatus secured. Pre-employment and periodic eye examinations designed to detect visual defects and visual deterioration over prolonged periods are now possible. Furthermore, visual standards can now be established for the selection of suitable candidates for this exacting work.

The Division continues to be used as a demonstration unit by several universities. For the first time, a request has been received from a university school of nursing for a block of field work for two post-graduate nurses.

Several departments already receiving the division's services have indicated a desire to provide more suitable accommodation for existing health units or to provide space for additional units. Plans for such local expansion which have been completed during the past fiscal year will bring the total of the division's Health Units operating in the Ottawa area up to 19, thus providing a complete health-counselling service to almost 22,000 civil servants.

Statistical Tables

Tables 1 to 5, pages 123 to 126, summarize the activities of the Civil Service Health Division for the fiscal year.

Table 1 gives the total visits made to the Health Units during the fiscal year by sex, nature and classification of visits, and disposal. As this division has now been in operation for a period of five years, the totals for the four previous years have been included in the table for comparison. A total of 169,084 visits, an increase of slightly in excess of 33,000 over the previous year, were made to Health Units. The male to female ratio of approximately 4:5 is of interest when considered in relation to the over-all sex distribution of the Civil Service population in Ottawa, namely, males 53, females 47. Of the total number of visits recorded, 123,000, or almost 73 per cent, were first visits or visits resulting from new disabilities. The remainder were repeat visits to nursing counsellors for some condition previously reported. Of the over-all total, slightly over 20 per cent were for visits in which the socio-economic factors were primarily responsible or played a major contributory role. The factors most frequently involved in this group of visits were those related to personal health and hygiene, nutrition and budgeting, family health problems, emotional disturbances, and factors associated with severe physical handicaps.

Respiratory, digestive, diseases of the skin and cellular system, and menstrual disorders, in that order, are the predominating causes of visits to the Health Units. The ratio of respiratory to digestive disorders over the last fiscal year was 2:1, which compares favourably with experience of the previous four years. It is of particular interest to note that an extremely low percentage of employees (2·4 per cent) were sent home following a first visit to the Health Unit.

It will be apparent from examination of Table 1 that each year has seen an appreciable increase in visits to the Health Units, allowing for the expansion in the health counselling service during the first three years. As an indication

of the yearly increased participation, the ratio of employee health unit visits to the total number of persons supervised may be utilized. This "Index of Participation" may be expressed as the average monthly number of employee health unit visits per 100 personnel supervised. For the five-year periods ending 31 March 1952, these were 33, 40, 58, 65, and 70. Part of this increased participation is undoubtedly due to the policy of encouraging government departments to have employees report to the Health Unit following an absence on account of illness. The value of such return-to-work visits lies in controlling absenteeism, supervising the health of employees, protecting the health of fellow workers, and affording a medium of health education and instruction as well as interpreting the health service program to the civil service population.

Table 2 shows the seasonal fluctuation of visits to Health Units. The busiest months, as might be expected, were the late fall and winter months. Comparison of the incidence of respiratory and digestive diseases during the summer and winter months was of particular interest.

Table 3 gives a summary of the work conducted at the Health Centre. Some 6,844 examinations and consultations and treatment for emergency conditions were conducted by the staff of the Health Centre.

Table 4 summarizes the activities of the consultant psychologist. His services have been in increasing demand. During the year he has conducted a total of 559 consultations or interviews.

Table 5 summarizes retirements from the government service during the past fiscal year for medical reasons by cause of disability, and age group. Diseases of the circulatory system, the nervous system, and of the bones and organs of movement, in that order, constitute the chief causes of separation on medical grounds from the public service. Of the 225 separations, 190, or 80 per cent, occurred in the 50-60 age group.

The past year has been one of unusual activity in the employment phase off the Civil Service, of sharp increases and decreases, and of generally high turnover. This has meant an increased need for counselling and for professional assistance with job-adjustment and emotional problems. Employment of a growing volume of married women presents more occasions to discuss family health and social adjustments, but it also creates new problems in administration and supervision.

The nursing counsellors have felt real concern about the extreme fatigue, lowered resistance and work efficiency, and the effect on family life which they have observed in civil servants who are carrying two jobs. Efforts have been made to encourage employees to reduce such outside work to a minimum and to offset its effects in every possible way.

This past year has seen increasing integration of services with those of the community health and welfare agencies. The Division has participated in the development of the health division of the Ottawa Council of Social Agencies, particularly in the creation of a recognized system of inter-agency referrals, and the organization of a health workers' group for the study of community health problems. These latter two developments have stimulated interest in comparable projects for local social workers.

IMMIGRATION MEDICAL

The Immigration Medical Service acts in a medical advisory capacity to the Department of Citizenship and Immigration on medical matters pertaining to immigration and is responsible for the examinaton and treatment of all immigrants arriving in Canada. The majority of immigrants are examined overseas by Canadian medical officers and locally-engaged physicians of high repute who are directly under the supervision of Canadian medical officers. During the year, due to the sudden increase in the number of prospective immigrants presented for examination in the British Isles and Continental Europe, additional doctors were required. Canadian physicians on post-graduate studies in these countries were temporarily employed on per diem and per monthly basis, and rendered invaluable service to this Department.

The majority of immigrants undergo a complete medical examination overseas. This examination includes an X-ray of the chest and any additional radiological and laboratory investigation that may be required. All immigrants arriving in Canada are again inspected and those who have not had a complete medical examination overseas receive a detailed examination at the port of arrival. Immigration hospitals are maintained at the principal ports in Canada. These hospitals are fully equipped and provide up-to-date facilities for the diagnosis and treatment of immigrants on their arrival at these ports.

The overseas headquarters for the British Isles and Continental Europe is in London, England. Offices staffed by Canadian medical officers are also maintained in Liverpool, Glasgow, Belfast, Paris, Brussels, The Hague, Copenhagen, Stockholm, Karlsruhe, Bremen, Hanover, Linz, Rome, Naples and Athens. All immigration medical examinations carried out by Canadian medical officers are provided free of charge. In addition, free chest X-ray is provided to immigrants reporting to the following offices for examination: London, Liverpool, Glasgow, Belfast, Dublin and Paris.

The number of full-time medical officers in the overseas service increased from 33 to 43 during the year. In addition to these full-time medical officers, local roster doctors and temporarily-appointed Canadian physicians were employed throughout the British Isles and Continental Europe. Roster doctors are also employed in Karachi, New Delhi and Hong Kong.

A total of 303,467 immigrants were examined abroad and 203,450 on arrival in Canada. Of the number examined, there were 82,548 from the British Isles, 217,855 from Europe, and 3,064 from the Orient.

During the year Immigration Hospitals at Halifax and Quebec were operated at capacity and, in the winter months, an immigration hospital at Saint John, N.B., was also in operation. Immigrants who became ill en route to Canada were treated in these institutions, which are fully modern and well equipped.

Medical care was also provided for persons accommodated in buildings operated by the Department of Citizenship and Immigration, and in the major Canadian seaports, for persons becoming ill prior to their departure for other parts of Canada.

Statistical data on the immigration medical activities of the department are contained in Tables 12 and 13 on pages 133 and 135.

QUARANTINE

The Quarantine Service shares with the Sick Mariners' Service the distinction of being the oldest health activity of the federal government. It is operated under the authority of the Quarantine Act and Regulations to prevent the entry of infectious diseases into Canada. In keeping with modern public health trends, quarantine procedures have been changed to make full use of the protection afforded by the various immunization procedures.

During the year, all persons coming from abroad were inspected on arrival and vessels other than those arriving from infectious areas or those with sickness on board were given radio pratique which permitted them to dock without delay. Ships from infected areas were granted quarantine clearance only after a thorough inspection of all on board and, in the case of vessels from plague ports after an inspection for evidence of rat infestation.

Organized quarantine stations under the control of a Quarantine Medical Officer are located at William Head, B.C., with sub-stations at Vancouver, Victoria and Esquimalt; at Quebec City, P.Q.; with sub-stations at Rimouski, Port Alfred, Sorel, Three Rivers and Montreal; at Halifax, N.S., and at Saint John, N.B.

Quarantine inspections under the direction of a Quarantine Medical Officer are also carried out at Goose Bay, Gander, Stephenville, Sydney, Halifax, Moncton, Montreal, Toronto and Vancouver Airports; the personnel at Gander and Montreal being on a full-time basis.

Duplicate pratique was issued to 675 vessels on request. Duplicate pratiques issued by the Canadian Quarantine Service are valid for clearance through the United States Quarantine Service, and, conversely, duplicate pratiques issued by the United States Public Health Service are accepted in lieu of a Canadian quarantine clearance.

During the year, 2,122 vessels were granted radio pratique. This is a provisional clearance which permits a vessel to dock immediately on arrival, following which a more detailed and final inspection takes place and final clearance is granted. Radio pratique is only issued to vessels from countries free from certain diseases and where no illness has occurred during the voyage.

Local Customs Officers, in their capacity as Quarantine Officers at unorganized ports, reported the entry of 552 vessels. A total of 2,816 vessels, having on board 477,061 persons, 197,453 of whom were crew members and 279,608 passengers, were inspected by medical officers of the service. In addition, 7,044 aircraft, carrying 285,996 persons, were inspected on arrival from abroad. Of a total of 824 vessels inspected for rodents, 524 had come from plague infected ports. Sixty-eight vessels were fumigated, 342 were granted exemption certificates, 289 had their certificates endorsed, and 125 were remanded to other ports. A total of 394 rats and 275 mice were recovered following fumigation. In addition to the fumigation of merchant vessels, the department, on request, fumigated various government ships and shore establishments.

International Certificates of Inoculation and Vaccination, prepared in booklet form, were distributed on request to persons travelling abroad; the demand for these greatly increased during the year. Active immunization is provided free of charge by the Quarantine Service at thirteen centres strategically located across Canada from coast to coast. A total of 700 inoculations were carried out. Vaccination against smallpox was also carried out free of charge at the various organized quarantine stations named above.

Additional duties carried out by departmental medical officers included the medical examination of pilots, lighthouse keepers, radio operators, and other civil servants serving in remote areas; immigration medical examinations; the treatment of sick mariners, and the pre-employment and periodic examination of marine personnel employed by the Department of Transport.

The Quarantine Service and Trans-Canada Airlines co-operate in the joint operation of a clinic at Montreal's Dorval Airport, International Terminal Building.

Statistical data on quarantine activities are contained in Tables 14 and 16, pages 136 and 138.

V. INSPECTION AND ENFORCEMENT SERVICES

FOOD AND DRUGS

The Food and Drugs Act and the Proprietary or Patent Medicine Act govern the safety, purity and quality, as well as the labelling and advertising, of all foods, drugs and cosmetics. Both Acts are administered by the Food and Drug Divisions of the Department, with assistance, in the case of enforcement activity and the drafting of legislation and regulations, from the Department's Legal Division.

The enforcement of legislation in Canada to protect the consumer from adulteration of food, drink and drugs began with the Adulteration Act which became effective on January 1, 1875. This Act, the first of its kind in the Western hemisphere, has had considerable influence on the development of the food and drug industries in Canada as well as on legislation in other countries. The Food and Drugs Act which succeeded the Adulteration Act in 1920 is subject to continuous review and revision in the light of changing conditions. A committee, consisting of officers of the Food and Drug Divisions and the Legal Division, has studied the Food and Drugs Act with a view to amendment of the Act embodying three kinds of changes: those which will clarify interpretation of the Act and arrange it in a more logical and rational order; those which will give additional powers deemed necessary for the protection of public health, by ensuring safe conditions of processing and recording of sale; and those considered necessary on a constitutional basis.

A major step in the protection of public health was taken on September 5, 1951, when regulations were added under the Food and Drugs Act requiring submission of data by manufacturers regarding the safety of new drugs. Drug manufacturers must wait until their submission has been accepted by the Department before marketing new drugs. A notice of the acceptability, including recommendations on the terms of sale, usually may be given within two months but a period of six months is set as the maximum for a decision. Submissions regarding 45 new drugs were reviewed from the inauguration of this control in September until March 31, 1952.

Effective working relationships with industry were maintained in the drafting of standards and regulations. Standards of composition and quality of flour and bread have been under active discussion throughout the year. This discussion culminated in a conference unique in food and drug history in that it brought together representatives of the consumers, industry and government. The result was increased mutual understanding of the problems involved; the ground-work was laid for regulations that would at the same time be practical, enforceable and in the interests of protection of the consuming public.

During the year, laboratories were established in the inspection offices in Saint John, N.B., and St. John's, Nfld., to obtain more rapid examination of import shipments at these ports. A more flexible scheme for the use of scientifically-qualified inspection staff was introduced and found to be satisfactory. As a result, it is planned to extend the scheme to include laboratories in the inspection offices in Windsor, Ont., Sydney, N.S., and Calgary, Alta.

Constant liaison with other enforcement agencies is necessary if duplication and gaps in enforcement are to be prevented. In this connection, assistance of a technical or enforcement nature was given to a number of other government departments and agencies, including the Department of Agriculture, the Department of Fisheries, and the Royal Canadian Mounted Police.

Canadian and International Standard preparations used in the assay of drugs were distributed to manufacturers and research institutions on request.

Since the Food and Drugs Act is international to the extent that it applies to imports, active collaboration must be maintained with other countries if the quality of imports is to be kept at satisfactory levels. The department takes an active interest in legislation and standards and methods of analysis of foods and drugs in effect in foreign countries and established by international or foreign authorities, including the World Health Organization, the United States Narcotic Commission, the British Pharmacopoeia and United States Pharmocopoeia Commissions, the Association of Official Agricultural Chemists, and the United States Food and Drug Administration.

The Divisions have several panels or boards of experts to advise on technical and medical problems. These include: the Advisory Panel on Foods, the Advisory Panel on Drugs, the Advisory Board on Proprietary or Patent Medicines, and the Canadian Committee on Pharmacopoeial Standards. Members of all boards or panels are medical men, pharmacists or other scientists who are university professors, clinicians or technical people in industry. They are selected because of their knowledge and also because, in many instances, the advice of independent experts not in government service is of considerable advantage. Much of the work is carried on by correspondence, but the Canadian Committee on Pharmacopoeial Standards meets at least once a year, the last meeting having been held in Ottawa on November 23, 1951.

Enforcement

The usual enforcement activities continued to occupy a considerable portion of the Division's time. These include: examination of import shipments and domestic foods and drugs for compliance with the relevant Acts; advice to manufacturers, importers and retailers on the requirements for compliance; scrutiny of radio commercials referring to foods, drugs, or cosmetics for the Canadian Broadcasting Corporation, under terms of the Broadcasting Act; examination of labels and advertising; assistance to other divisions and departments of government and some prosecutions for violations of the Acts. This work included review of 18,365 radio commercials and 5,325 labels and advertisements. Enforcement action may take one or more forms, depending on the circumstances of each case, and may consist of warnings, seizures or prosecutions. During the year 1,477 warnings were issued, 35 seizures of stocks of foods or drugs were made, and 104 prosecutions were carried out. Seizures and prosecutions are the last resort and serious efforts are made to correct deficiencies at the manufacturing level by warnings and advice.

More rigid enforcement of the prescription requirements of the regulations was applied with respect to the distribution of barbiturates, sulfa drugs and others. Prosecutions were found necessary in a number of cases to emphasize the seriousness of the distribution of these potent drugs to the general public without the supervision of a physician.

The high cost of meat led to an extensive "bootleg" operation in the sale of horse-meat. This meat was sold as beef and presumably came from uninspected animals. A series of 21 successful prosecutions have helped to curtail this practice and encouraged the establishment of horse-meat stores where inspected meat is sold with proper identification.

Increased efforts were made to study the sanitary practices of food and drugs manufacturing and processing plants in their relation to the quality and purity of the foods and drugs produced. Preliminary surveys of flour mills,

small canneries and cheese manufacturing plants have revealed that much remains to be accomplished with respect to sanitation and cleanliness in some of these plants. An extensive investigation of the sanitation of Canadian flour mills and their products was carried out in 1951 involving 50 mills. The proprietors of the mills studied in this survey were informed of their relative standing with respect to other mills and their replies indicate a willingness to take greater precautions with a view to eliminating contamination.

Practices used in coating, waxing and preserving raw food originating in other countries have increased the need for close scrutiny of this class of imported food. Deterioration of foods in storage and contamination under poor storage conditions necessitate a follow-up procedure on goods inspected at the point of manufacture or import.

A relatively large quantity of butter was imported into Canada during 1951 from Scandinavian countries and from New Zealand. These shipments were examined and found to be satisfactory for import. Special attention also was given to food colors, some of which, in the past, had represented a definite health hazard, and it was gratifying to find that no large problems presented themselves in this field during the year. Similarly, foreign exporters of dried fruits and nuts appear to be aware of Canadian standards for these products and the only significant problem encountered in this field during the year was in respect of some shipments of shelled walnuts.

The Information Centre, in its fourth year of operation, has prepared and issued 15 Trade Information and 37 Staff Information Letters and issued weekly reports on detained imports of foods, drugs, and cosmetics. The cataloguing of all drugs manufactured in Canada, including the collection of specimen labels, was continued during the year.

Scientific and Technical Studies

Scientific and technical studies related to food and drug legislation may be divided into five classes: development of analytical methods and standards; fundamental research, including studies of the actions of new drugs or chemicals used or intended for use in foods; surveys of the labelling and advertising of nationally or locally advertised products; routine analyses of samples where adulteration or misbranding is suspected and surveys of various products collected from all parts of Canada. Both of these last-named functions are carried out mainly in the regional laboratories and are summarized in Tables 6 to 8 (incl.) Pages 127 to 129.

Development of Analytical Methods and Standards

Work to develop new methods of assay and new standards for foods or drugs occupied a large part of the time in the central laboratories in Ottawa with some assistance from the regional laboratories.

Surveys of Labelling and Advertising

A survey was carried out of the meat products manufactured in establishments not registered with the Department of Agriculture. Of these products, 76 per cent were found to be misbranded. However, none were adulterated. Those which were properly labelled were, for the most part, manufactured in Alberta and Manitoba. In addition, as routine work, labels of material examined in the laboratories were examined for compliance with the regulations, which resulted in reasonably complete surveys of the labelling of various classes of foods and drugs. The collection of labels for pharmaceutical products by companies was continued and 5,084 labels and cartons were added to the master files.

Laboratory Studies

The following are examples of the studies conducted in the various sections of laboratory services in the central laboratory at Ottawa. Much of the fundamental research forming part of these studies has been reported in scientific literature.

Food Chemistry Section

Arsenic in Canned Foods

While in many areas the new organic insecticides are largely replacing arsenic compounds as spray materials, sufficient arsenic is still being used to warrant an investigation of the possible contamination of canned fruits by this element. A modified method was devised to determine the arsenic content of canned fruits from all parts of the country and it was reassuring to find that no significant amounts of arsenic were present.

Starch in Meat Products

As relatively small amounts of starchy materials or dry milk powder are frequently added to meat products to improve their texture, a procedure was developed by which it is possible to determine the presence of small amounts of starch in milk powder, soy flour, sugar and glycogen.

Antioxidants

Methods developed in this laboratory for the determination of antioxidants were applied to a study to establish the keeping qualities of lard to which antioxidants had been added.

Fill of Containers

A method has been developed for the estimation of the fill of containers of free-flowing food products.

Stabilizers and Emulsifying Agents

As small amounts of vegetable gums, agar, gelatin, Irish moss and other stabilizers are employed in a wide variety of food products, a qualitative procedure was developed for their detection and identification in foods.

Metallic Impurities

The study on the metallic impurities of various food products was continued and detailed information was accumulated on edible bone flour and jelling agents. The fluorine content of the bone flour imported into Canada was found to be quite high and as a result of this information a limit on the fluorine content in this product has been included in the regulations as well as limits on arsenic, lead, zinc and copper.

Microbiology Section

A nation-wide survey of the bacteriology and filth content of cheese has revealed a positive enteric and Staphylococcus-poisoning hazard in soft cheeses made from unpasteurized milk. A substantial proportion of all cheeses contain an objectionable content of manurial fragments and bovine and rodent hairs. A staphylococcus problem is growing in significance due to the selective survival of Staphylococci in milk from cows treated with penicillin. Penicillin-resistant enterotoxic strains of Staphylococci have been shown by phage-typing methods to have been disseminated in large numbers from Halifax to Vancouver in cheese from a single factory. These studies were basic to the formulation of new cheese regulations.

Studies in the detection of certain bacterial toxins in foods have progressed favourably. The presence of dermonecrotic toxins from Staphylococci is a useful indication of the existence of enterotoxins in foods. Attendant upon these studies, several requests for aid in determining the cause of food-poisoning outbreaks have been received from the Department of Agriculture, from the National Research Council and from industry. Conclusions satisfactory to all three have been reported.

A survey of 50 representative flour mills has established a general correlation between the degree of insect infestation of the mill and the content of

insect fragments and microorganisms in the flour.

New methods developed for the detection of microscopic filth were applied to surveys of market flour, cake-mixes and packaged egg-products. Fears of a Salmonella hazard in products containing egg-powders have been allayed by failure to isolate Salmonella from 300 market packages. Microbial and insect-fragment counts were unnecessarily high in a few instances.

The microbial quality of bone-meal-flour is now routinely assayed in accord with newly devised standards.

Vitamin and Nutrition Section

A comprehensive survey, aimed at including all vitamin manufacturers, has indicated to date that there are companies which have no analytical control facilities for checking the potency of their vitamin products. An educational campaign has been initiated in an effort to convince these manufacturers of the need for effective control.

Collaborative studies have been continued with the U.S. Pharmacopoeia on the microbiological assay for vitamin B_{12} and with A.O.A.C. on Vitamin A and rutin.

A simple and direct procedure has been published for the estimation of tocopherol (Vitamin E) in tocopherol concentrates. A comparison of eight methods for the estimation of vitamin C in pharmaceuticals has been completed.

Microbiological and chemical studies on vitamin B_{12} have resulted in the development of a procedure for the differential estimation of vitamins B_{12} and B_{12b} utilizing the microbiological assay. The method is based on the destruction of vitamin B_{12b} with ascorbic acid.

Alcohol, Cosmetic and Color Section

Alcoholic Beverages

The survey of distilled beverages and wines on the Canadian market was continued. Samples analysed were mainly Scotch Whiskies and Rums. A fundamental investigation of the maturing process in spirituous beverages was begun.

Cosmetics

This Section participated in collaborative studies of methods of analysis of deodorants, "cold wave" solutions and "neutralisers", with the Cosmetic Division of the U.S. Food and Drug Administration.

Food Colors

The exhaustive study of the dithizone method of determining traces of heavy metals in food colors, begun last year, was completed and critically reported upon. This work was undertaken in collaboration with the U.S. Food and Drug Administration. A chromotographic method of separation of the colors in mixtures of colors was worked out in the laboratory.

Pharmacology and Toxicology Section

Verarum Alkaloids

A suitable test method based on the hypotensive effect of these alkaloids in roosters was worked out.

Antihistamines

An investigation was completed on a method to evaluate the local anaesthetic properties of the antihistamines.

Nitrite in Meat Products

A study was commenced to ascertain if the permitted amount of nitrite in meat products was injurious to health.

Dimercaprol (BAL)

A collaborative study was commenced to determine if the British Standard BAL would be a suitable standard to adopt as an International Standard.

Posterior Pituitary Extracts

A method for determining the pressor potency of these extracts in the adult male rat has been worked out.

Antabuse

Studies on the potentiation of barbiturate action by Antabuse were continued.

Analgesics

An investigation of the mechanism of action of addicting analgesics through their effect on enzyme systems has been instituted.

Bread Additives

A long-term chronic toxicity test on some of the chemicals added to bread is in progress.

Scallop Toxin

Attempts to isolate the active component from extract of scallop digestive glands are being made.

Acute Toxicities

Acute toxicities of Potassium Iodide, Potassium Iodate and Sodium Nitrite were determined.

Coronary Dilator Drugs

For quantitative studies on these drugs a method has been worked out on isolated mammalian hearts and in the intact animal. Investigations concerning the coronary dilator actions of aminophylline, khellin, papaverine, paveril, and d-tocopherol are underway.

Insecticides

DDT, chlordane, parathion, toxaphene, lindane, methoxychlor and T.E.P.P. were studied for their possible deleterious effect on the isolated rabbit heart. No significant effect on the heart-beat or coronary flow was detected at doses roughly corresponding to 10 times the amount that could be taken with foods contaminated with the highest allowable levels.

Physiology and Hormones Section

Investigation of the adrenal cholesterol response to ACTH indicated that a dose approximately 1,000 times that used in the adrenal ascorbic acid depletion method was required. The factors affecting the level of adrenal cholesterol were examined in an attempt to improve this method of assay. A study of some of the factors influencing the precision of the biological assay of adrenal cortical hormones was initiated, and it has been established that liver reducing substances provide as good a criterion of the response to these hormones as liver glycogen. A satisfactory method of assay was developed using adrenalectomized male mice. Collaborative work with the United States Pharmacopoeia is under way on the bio-assay of adrenal cortical extracts. The investigation of chemical procedures for the assay of cortisone was continued.

It has been demonstrated that the potency of the different types of insulin preparations can be determined by means of the mouse convulsion test, employing crystalline insulin as the standard. The hypoglycemic response to insulin in mice can be detected by placing the treated animals on sloping screens. This method of assay has been shown to be as precise as the mouse convulsion test described in the British Pharmacopoeia (1948). A collaborative assay of the Third International Standard for insulin was undertaken at the request of the Committee on Biological Standardization of the World Health Organization.

Toxicity studies on stilbestrol have been carried out to determine the amount per diem required to stop breeding in the adult male rat. Vitamins A and E did not influence the inhibitory action of stilbestrol on the accessory sex organs in the male rat. A study on the effect of stilbestrol in hypophysectomized adult rats was initiated and is being continued.

A method for estimating the LD_{50} of the toxin obtained from clams and mussels was developed, using adult female mice. The preparation of a standard for use in determining the toxicity of shellfish extracts was initiated.

Pharmaceutical Chemistry Section

An interesting study was undertaken to determine the relationship of the disintegration time of tablets to the availability of the medication contained in the tablet. Human subjects are used in this study with riboflavin (Vitamin B₂) as the medication, since it is readily determined in urine. Work was continued on a weight variation test for tablets.

Collaborative work was carried out on the assay of propyl thiouracil and propylene glycol with the Association of Official Agricultural Chemists.

Organic Chemistry Section

A method for rapid, accurate quantitative analysis of narcotics was developed and used for analysis of seizures of narcotics and pharmaceutical preparations containing narcotics or narcotic salts.

Studies on alkaloid identification were extended. Microchemical color and crystal reactions for the identification of new synthetic narcotics were published in the United National Bulletin on Narcotics.

Physico-chemical properties of narcotics have been studied. The ultraviolet spectra and X-ray diffraction patterns of 43 important narcotics were obtained. The project on the determination of the country of origin of opium, undertaken in collaboration with the Narcotic Commission of the United States, was continued. The data obtained were subjected to a discriminatory function test and it was found that opiums from different countries could be distinguished on the basis of analytical findings.

A study of microchemical methods for identifying barbituarates was begun. A new class color reaction for identifying five substituted barbiturates was found.

Biometric Section

Advice was given to the other sections of the Food and Drug Divisions on the statistical aspects of their work, such as the choice of efficient designs and valid methods of analysis for their experimental investigations.

Animal Colony

There were 19,991 rats bred in the laboratory animal colony and used for experimental work. In addition, 1,150 mice were purchased and used for experimental work as well as 524 other animals including rabbits, guinea-pigs, pigeons, roosters and chicks.

Proprietary or Patent Medicines

The Proprietary or Patent Medicine Act, administered by The Proprietary or Patent Medicine Section, of the Food and Drug Divisions, governs the manufacture and sale of secret formula prepared medicines offered to the Canadian public under proprietary or trade names.

Registration of any drug in this class is compulsory, and a licence must be obtained before the product is placed on the market. The manufacturer submits his qualitative and quantitative formula, stating his therapeutic claims and directions for use. This information is assessed and passed on by medical officers in the Department, and if the article otherwise meets the specifications of the Act registration may be effected.

The sale of all registered preparations is licensed on a year to year basis so that, if experience in use or advances in medical knowledge make it apparent that it is not in the public interest to permit further sale, a licence is refused.

Under this system of dual control by registration and licence, which has been in operation since 1919, worthless as well as harmful products are screened out; promises of cures and false, exaggerated or misleading claims are prohibited. The dosage of potent drugs must be within strictly defined limits; alcoholic preparations must be sufficiently medicated so as to preclude their use as intoxicants. Narcotics, barbiturates, sulphas and prescription drugs are not allowed. Treatments for serious diseases are ruled out.

An Advisory Board of physicians and pharmacologists, appointed by the Minister under Section 9 of the Act, prescribes what shall be deemed sufficient medication of medicines containing alcohol in excess of $2\frac{1}{2}$ per cent to make them unfit for use as alcoholic beverages; also what shall be the maximum single and daily dose of any drug mentioned in or added to the schedule of the Act. The Board also advises as to the safety of other drugs, and investigates the suitability of unusual combinations.

During the year the registrations of 3,488 preparations were reviewed. One hundred and seventy-four new medicines were examined for registration: 122 were approved and 52 rejected. Two thousand and sixty-two labels, wrappers and newspaper advertisements were scrutinized. In addition, approximately

11,730 radio commercials were reviewed in co-operation with the Canadian Broadcasting Corporation, which requires that all radio announcements dealing with proprietary medicines be submitted and approved before broadcasting. Claims in those continuities which were considered to be false, misleading or exaggerated were marked for deletion or revision.

Samples were secured on the open market and examined as to quality and quantity of drugs and labelling. In this connection the Inspection Service throughout Canada contributed by procuring samples and reporting irregularities in recommendations and methods of merchandising.

Throughout the year manufacturers were interviewed to discuss problems arising out of present requirements, and through these meetings co-operation of the trade has been maintained, resulting in improved standards of proprietary medicines in the interest of the public and in keeping with the spirit and intent of the Act.

Assistance was also extended to the federal, provincial and other officials concerned with the administration of laws and regulations otherwise relating to the sale of such products.

NARCOTIC CONTROL

Canada's addict population during the year remained much the same. Officials of the Division of Narcotic Control maintained a maximum of vigilance in all phases of the administration of the Opium and Narcotic Drug Act. Enforcement work, ably carried out by R.C.M. Police officers, showed results in more convictions for offences under the Act and these convictions on the whole drew sterner sentences than were awarded during the year 1950.

Legal transactions on the part of those authorized to undertake them were supervised carefully and no difficulty was experienced with any licensed whole-saler in this regard. Adequate stocks of narcotics were at all times maintained in the country by wholesalers, ensuring complete protection for the sick of the population. The Division continued its policy of close co-operation with the United Nations Narcotic Commission, as also with those countries from which basic narcotic supplies were secured or to which narcotic medication was exported.

In so far as supplies found in the illicit market were concerned, it was again effectively demonstrated that such supplies were the results of illicit imports rather than diversion from legal channels within the country. Heroin on the illicit market was apparently readily available during the year at several urban points, and information reaching the Division was to the effect that prices in the illicit traffic remained sufficiently steady to indicate ample supplies were being smuggled into the country.

Such prices are fantastic when compared with those of legitimately purchased narcotics and can only indicate the desperation of mind and body that must force addicts to any lengths in securing money to enable them to satisfy the addiction habit.

Legitimate Trade

Canada controls all narcotic transactions by a strict system of licensing. To this end 154 firms were licensed as narcotic wholesalers, and 130 licences to import and 52 licences to export were issued in the year under review. The Opium and Narcotic Drug Act requires that any drug included in the schedule

to the Act, or preparation containing such a drug, no matter how small the drug content, may be brought into the country only on the authority of a licence issued by this Department and, once admitted to Canada, may only be distributed by firms licensed by the Department. Distribution of such supplies is limited to other wholesalers, physicians, druggists, veterinary surgeons, dentists and hospitals on the basis of a signed order and each requisition must be signed by an individual entitled to purchase narcotic supplies and who is in good standing with his respective provincial association or college.

Monthly reports of sales of narcotics and preparations thereof submitted by licensed distributors indicate all such transactions except codeine compounds. Moreover a staff of three pharmacist auditors is constantly engaged in auditing the records and stocks of all wholesalers. These auditors also check security measures at hospitals and government institutions where narcotics in any form are maintained and utilized. A total of 123 wholesale firms were so audited during the calendar year. Nine hundred and ninety hospitals were inspected and 68 special investigations were undertaken by these auditors.

During the year an Order in Council was passed including all synthetic phenanthrene alkaloids in the Schedule to the Opium and Narcotic Drug Act to ensure that an adequate instrument of control would be available as and when synthetic drugs of this nature, possessing addiction properties, made their appearance on the Canadian market.

The volume of imports of the chief narcotics, as also the estimated consumption, are shown in tables 10 and 11, pages 131 and 132.

Revenue to the Department through licences and seizures was \$33,928, while expenditures for legal fees and court costs were \$58,168.

Crime and Convictions

Of 376 convictions under the Opium and Narcotic Drug Act during the judicial year ending September 30, 1951, 339 were for illegal possession, 29 for unlawful sale or offering for sale, 7 for illegal transportation and one for illegal cultivation of Cannabis Sativa. Of the total number of convictions, 337 involved heroin, the remaining cases being divided as follows: morphine, 12; marihuana, 10; demerol, 4; opium, 4; poppy heads, 2; cocaine, 3; and codeine, 4. These statistics provide further proof that illicitly-imported heroin is by far Canada's chief narcotic problem.

In relation to these convictions, the following sentences were imposed:

						,	
6	month	s and	l less	than	1	year	145
						****	103
2	years	and	less	than	3		68
							28
4	years	and	less	than	5		15
5	years	and	less	than	6		15
6	years	and	less	than	7		1
7	years						1

Of those convicted 266 were Canadian, American or British, 9 were Chinese and one was a Yugoslav. It is interesting to note that, of these convictions, only four concerned individuals under twenty years of age, whereas the largest age group was of individuals between the ages of twenty-five and twenty-nine. Included in the above convictions were three relating to professional people, all of whom were nurses. One nurse and one physician were also convicted under the Criminal Code, on charges relating to narcotic matters.

A brief review of two cases would serve to illustrate some of the enforcement problems that confront R.C.M. Police officials, acting on behalf of the Department.

During the month of May 1951, Customs officers in a Quebec town stopped and searched a suspected diamond smuggler entering the country. In a money belt around his waist was found thirty-six ounces of heroin which he was attempting to bring into Canada. This arrest resulted in the smuggler being convicted of a breach of the Opium and Narcotic Drug Act and subsequently sentenced to three years in prison, a fine of \$500 or in default, six months additional imprisonment.

A Vancouver father and two sons who operated a restaurant which was notorious as a gathering place for addicts were arrested when R.C.M. Police officials raided both their place of business and their home. A large quantity of heroin capsules was found. The father was sentenced to four years' imprisonment with hard labour, a fine of \$500 or six months additional, while the sons were each given three-year sentences with hard labour, fines of \$250 or additional three months' imprisonment. These individuals, not themselves addicted to narcotics, had entered the illicit traffic in an effort to reap lucrative profits from this insidious trade. Convictions under the Opium and Narcotic Drug Act during judicial year ended September 30, 1951, are shown in Table 9, page 130.

Retail Control

Druggists, upon request from the Division, continued to supply reports of sales of narcotics to the Department in even greater volume than heretofore and such information provided the opportunity to uncover abnormalities in the use of narcotics and the method of obtaining them, both on the part of known addicts as well as in connection with medical cases and professional personnel faced with a narcotic problem. Approximately 7,500 reports of this nature were checked by the staff of the Division of Narcotic Control during 1951, representing, of course, multiple returns on the part of Canadian druggists.

The Division enjoyed continued co-operation with registrars and senior officials of organizations in both the pharmaceutical and medical fields.

A fifth class of instruction to assist R.C.M. Police officers engaged in drug store inspection work was held during the year under guidance of the Division. Keen interest and appreciation of the practical values of such a class was expressed by the members.

International Co-operation

Every effort was made to ensure that Canada's international obligations in relation to all narcotic matters were maintained. Routine reports and submissions of additional information of international interest were attended to and 61 reports of seizures in the illicit traffic were submitted for the information of the United Nations Narcotics Commission.

PUBLIC HEALTH ENGINEERING

Departmental interests in the field of public health engineering are concerned with the application of engineering principles so as to influence or control the forces and processes which affect environment in relation to health. The present concept of environmental health presents an ever-widening range of opportunity for greater service in the application of the knowledge and experience of public health engineers. The many and varied activities of the Public Health Engineering Division are carried out by a direct program and

through technical consultation with other agencies concerned with problems of mutual interest in the field of sanitation. Assistance is also rendered to provincial programs sponsored through the General Health Grants administered by the Department.

Functional activities of the Division are directed to those phases of the environment which have a bearing on the health of persons travelling on, and the operating personnel of, railways, vessels and aircraft; persons visiting national parks and other federal property, and those employed there. In addition, the Department is responsible for the enforcement of international requirements governing the handling and shipping of shellfish. Federal legislation authorizing this work is contained in a number of acts, notably the Department of National Health and Welfare Act, 1944, with particular reference to Section 5(a), (d), (e) and (f), the Public Works Health Act and Regulations concerning water for drinking and culinary purposes on common carriers, and the regulations governing the inspection and supervision of the handling and shipping of scallop meat.

Departmental operations also specifically involve the surveillance of water samples on federal property; ice supplies used by railways for chilling food and drink, treatment and disposal of sewage, garbage and other wastes on federal and railway property; sanitation on the right-of-ways of interprovincial and international railways, including stations, bunkhouses, work camps and restaurants; working conditions in federal offices, including questions of lighting, ventilation, and space; and pollution of boundary waters between Canada and the United States.

The conduct of this work, embracing the whole field of engineering practices and treatment methods, involves the use of sanitary surveys and examination of sources of supply, treatment processes and control measures. When requested, designs of sewage disposal plants and water treatment plants are prepared, including the necessary plans, and, in some instances, construction is supervised.

Sanitation problems in the Yukon and Northwest Territories are constantly being referred to this Division for study and advice. Special research has been initiated concerning problems on thermal conditions affecting underground services in perma-frost areas. During the past year assistance was rendered in checking a typhoid epidemic at Gros Cap, on Great Slave Lake. Other problems, such as the disposal of arsenic wastes and the effects of stack fumes, are being carefully watched by the Division's engineers in the far north. Where rapid development is anticipated, the proposed locations of town sites have been examined and other related environmental health strides made. Assistance on water supplies and sewage treatment has been rendered to other agencies and close liaison has been maintained in this field with the federal authorities responsible for administration. Activities associated with the development of the Yukon and Northwest Territories have become an increasingly important phase of the Division's work.

Participation on matters of civil defence has occupied much time and study by engineers of this Division in the preparation of sections dealing with water and sanitation as contained in the department's Civil Defence Health Services manual. Advantage was also taken of an opportunity for several of the division's engineers to attend specialized training courses of a technical nature on civil defence.

Other activities include active co-operation with officials of provincial health departments, the United States Public Health Service and numerous committees and organizations concerned with problems of mutual interest.

Federal departments, such as Fisheries, National Defence, Public Works, Transport, Veterans Affairs, Citizenship and Immigration, and Agriculture, are assisted in problems arising in connection with different aspects of public health engineering. In this regard special mention is made of studies conducted on federal water supplies which have led to the improvement in water quality through the adoption of recent measures for water treatment. Engineering assistance on problems of water supply and sewage disposal for Indian residential schools and hospitals has required increasing attention during the past year. These are but a few of the problems that have occupied the attention of public health engineers.

By agreement between this Department, the Department of Fisheries and the United States Public Health Service, requirements governing the taking, handling and shucking of shellfish for export to the United States have been established and are used as a guide in the administration of control measures in the shellfish industry. Certificates for the export of shellfish are issued when compliance with these requirements is obtained.

The division is actively associated with water pollution problems and pollution control programs. A special investigation was conducted at the request of the Department of External Affairs concerning conditions in Rainy Lake, resulting from discharges from mining operations in Steep Rock Lake. The Public Health Engineering Division is represented by two of its members, recently appointed by the International Joint Commission, on the newlyformed Board of Technical Advisers on Boundary Water Pollution Control. The division takes an active part in the program with the Pollution Control Council, for the Pacific Northwest Basin.

In co-operation with other federal, provincial and United States authorities, consideration is being given to an air pollution problem in the Detroit-Windsor area, which has been referred to the International Joint Commission for study.

Some major activities during the year include 849 sanitary surveys of water supplies, ice supplies, shellfish growing areas, etc.; the collection of 7,111 water samples for analysis; 1,062 examinations of railway property, including stations, bunkhouses, work camps, coach yards and restaurants; and 86 examinations of sewage treatment plants to check the efficiency of operating procedures and control.

The division continued to provide technical consultation services and fulfilled numerous requests for information on problems related to environmental health. During the year a total of ten technical papers were prepared for publication or presentation to technical societies.

Improvements are evident in many fields of environmental health by virtue of the work accomplished by the division during the past fiscal year, although many problems still require attention. The increasing number of requests from other federal departments for professional advice has afforded this division many opportunities for service.

WELFARE BRANCH

I. INTRODUCTION

Administration

The report of the Welfare Branch reflects the development of Canada's program for the aged. The coming into force of the new Old Age Security Act, the Old Age Assistance Act and the Blind Persons Act to replace the Old Age Pensions Act has added new responsibilities to the department and new administrative functions.

Under the Old Age Security Act, the federal government for the first time assumed full responsibility for pensions for those seventy years of age and over. These payments are subject to a residence qualification, but not to a means test. As the procedures for paying this universal pension are somewhat similar to those of the Family Allowances Act, the administration of the new pensions was assumed by the Family Allowances Division and its regional offices, with the additional title of the Old Age Security Division.

The Old Age Assistance Act provides for pensions, subject to a test of income eligibility, for those sixty-five years and over, the cost to be shared equally with the provinces. Provision for blind persons, which had formerly been included in the Old Age Pensions Act, was made the subject of separate legislation, the Blind Persons Act. This Act also provides for an income eligibility test and for a sharing of the cost with the provinces, with three-quarters of the allowance paid for by the federal government. The administration of these two federal-provincial programs remains with the former Old Age Pensions Division, which is now known as the Old Age Assistance Division. This present report, therefore, includes for the first time sections on Old Age Security, Old Age Assistance, and Blind Persons Allowances, as well as those on Old Age Pensions for part of the fiscal year, and on Family Allowances and Physical Fitness for the whole fiscal year.

The Welfare Branch continued to administer the departmental grant made to assist the eight Canadian schools of social work in relieving the shortage of trained social workers. The grant for the fiscal year was \$100,000. In view of the federal grants to Canadian universities introduced in 1951-52, separate grants by this department to the schools of social work will not be made in the future, except for an interim grant for one year to the Maritime School of Social Work because of special circumstances.

Applications of welfare organizations for incorporation under the Dominion Companies Act were examined by the Welfare Branch at the request of the Secretary of State.

An amendment to the Excise Tax Act, passed in 1950, provided for the exemption from sales tax of public institutions devoted to the care of children, the infirm and the aged, if they were certified by the Minister of Health and Welfare to meet the requirements of the Act. This was in line with the certification of hospitals for exemption, which is carried out by the Health Branch. Sixty-three institutions were certified during the fiscal year. This brings the

total of institutions certified to 303. Eight applications were rejected during the fiscal year because the institutions were unable to meet the requirements of the Act. This brings the total of rejected applications to 137. Five applications have been cancelled or suspended. Institutions have been asked to file periodic returns, indicating whether they are still eligible for certification under the Act.

Research on welfare matters increased during the year. A considerable amount of preliminary research was required for the new legislation on Old Age Security and Old Age Assistance. Work on the Survey of Welfare Positions in Canada, undertaken the previous year at the request of the National Conference on Personnel in Social Work, progressed to the point where an analysis of the returns was begun. The report will be completed in the course of the next fiscal year. Canadian material was also secured for a number of studies undertaken by the United Nations Department of Social Affairs.

Representation was provided to certain interdepartmental committees. These include the Interdepartmental Advisory Committee on Immigration and its Sub-committee on Migration Policy; the Interdepartmental Committee on Social Security; and the Interdepartmental Group on Technical Assistance, which deals with requests for experts and scholarship and fellowship programs under the Colombo Plan and the United Nations Technical Assistance.

The number of social welfare fellowships awarded by the United Nations for study in Canada increased over the previous year. The Welfare Branch arranged programs for Fellows from the following countries: one each from Australia, Belgium, Brazil, Israel, Japan, Sweden and Switzerland, and two each from Finland and India.

The Branch provided Canadian representation to certain United Nations and other international meetings. The Director of Family Allowances, Mr. R. B. Curry, was the Canadian delegate to the seventh session of the Social Commission, held in Geneva from March 19 to April 14, 1951, and was a member of the Canadian delegation to the fourth session of the Inter-American Conference on Social Security held in Mexico City from March 24 to April 8, 1952. The Executive Assistant to the Deputy Minister of Welfare, Mrs. D. B. Sinclair, was the Canadian representative to the International Children's Emergency Fund. She attended the spring meetings of the Program Committee and the Executive Board held in New York, and the autumn meetings of the Program Committee and the Executive Board held in Paris. She served as chairman of the Executive Board for 1951 and 1952.

The main Welfare Branch expenditures were as follows:

	Administration	Net Benefits
Welfare Branch	. \$ 31,296	-
Family Allowances		\$320,457,673
Old Age Security	. \$ 498,146	\$ 76,066,834
Old Age and Blind Pensions		\$ 80,206,025
Old Age Assistance	. \$ 91,694	\$ 2,277,238
Blind Persons Allowances		\$ 721,449
Schools of Social Work	. \$ 76,723	\$ 152,249 \$ 100,000
		\$ 100,000
	\$2,556,626	\$479,981,468

II. FAMILY ALLOWANCES

The annual report of the Division for the fiscal year ended March 31, 1951 indicated that a further increase in children, families and expenditures could be anticipated in the next fiscal year. This has proved correct. The number of children on whose behalf family allowances were paid as at March 31, 1952 was 4,530,186, an increase of 162,795 over the previous year. The number of families increased by 56,529, from 1,910,192 to 1,966,721. Total payments for the year rose to \$320,462,000, an increase of \$10,708,145 over the fiscal year 1950-51. The average monthly allowance per child as at March 31, 1952 remained the same as at that date in 1951, namely \$6.00, while the average payment per family rose from \$13.72 to \$13.82.

While the numbers of registrations received both from families already receiving allowances and those applying for the first time were greater than in the previous year, it is interesting to note that the increase in the latter group was considerably larger.

The overall increases mentioned are due partially to the fact that the birth rate in Canada over the past several years has been considerably higher than it was in 1934 and 1935 and thus the number of children receiving allowances for the first time each year remains higher than that of children on whose account payment ceases because of their reaching the age of sixteen. The birth rate, per thousand, was 20.6 in 1934 and 20.4 in 1935, as against 26.8 in 1950 and 27.2 (preliminary figure) in 1951. Another factor that contributed to the increases was the ever-rising number of immigrants to Canada; for example in the calendar year 1950 approximately 17,000 foreign-born children were admitted to Canada, whereas approximately 42,000 were admitted in 1951. Since there is a waiting period of only one year before the children of immigrants to Canada may become eligible for family allowances, the large numbers who entered Canada in 1950 and in the early part of 1951 became eligible for allowances during the past fiscal year.

Costs of Administration

Notwithstanding a reduction of 6.2 per cent in the number of employees, the administration costs for the fiscal year 1951-52 increased by \$404,069 over the previous fiscal year. This substantial increase was caused partly by the general increase in salaries of civil servants and the rise in the cost of supplies and equipment, and partly by the acquisition of additional space for the expansion and integration of central registries and other administrative services for both Old Age Security and Family Allowances.

A breakdown of the total administrative costs follows:

National Health and Welfare	\$1,858,000
Finance—Treasury	2,627,335
Public Works	234,758

Total \$4,720,093

In relation to the total disbursements of Family Allowances in 1951-52, amounting to \$320,880,854, the administrative costs were 1.47 per cent as compared to 1.39 per cent in the preceding year.

Staff

As at March 31, 1952, the overall establishment of the Division stood at 694 positions, including 31 vacancies. This represents a reduction (the fourth in as many years) of 46 positions from the previous total of 740 as at March 31, 1951.

The number of permanent positions on strength increased to 428 from 406 in the previous year; however, only 305 of these are filled by permanent employees; this is accounted for by the transfer of several permanent employees to the administration of the Old Age Security program and by the usual turn-over in staff due to retirement, resignation and other causes, while the vacancies were filled in each instance by employees who could not at the time be certified in a permanent capacity. It is expected however that it will be possible in the not too distant future to consider the permanent appointment of a high percentage of the 123 temporary employees now occupying permanent positions. Efforts will also be made to abolish as many as possible of the 31 positions that were vacant as at March 31, 1952. However, it is felt that the time is fast approaching when there will be little, if any, leeway in the overall establishment and the present work-load would indicate that the minimum overall establishment for efficient administration would be in the vicinity of 670 positions.

The introduction of the Old Age Security program necessitated the creation of a number of additional positions in all Regional Offices. These positions, for the greater part, were filled by employees of the Family Allowances Division as the result of promotional competitions, and while these promotions had a very good effect on morale generally, they resulted in a large turn-over in staff, particularly in the lower brackets where recruitment of suitable replacements presented quite a problem. The Department is grateful for the excellent co-operation on the part of the Family Allowances staff (a great percentage of whom were called upon to transfer all or part of their statutory leave to the next fiscal year), and for their willingness in performing so much overtime in the calendar year 1951 in connection with the registration of pensioners under the Old Age Security Act. The transfer of so much statutory leave, together with the accumulation of leave credits for unpaid overtime performed, will have to be borne in mind when considering any reduction in the overall number of positions in the next fiscal year. It is hoped that the use of additional dictating, transcribing and improved indexing equipment, particularly in the larger offices, will alleviate to some extent the pressure on the staff.

The Organization Branch of the Civil Service Commission completed a survey in the Quebec Regional Office in July 1951 and the resulting report recommended an establishment of 183 positions including 136 permanent positions. There remain only the Regional Offices of Toronto and St. John's, Nfld., where such surveys have not been made as yet. It is expected that these will be undertaken in the course of the next fiscal year. Most of the adjustments in staff recommended by the Civil Service Commission in its reports on the surveys of the remaining Regional Offices have already been implemented.

Changes in senior staff during the last fiscal year were: the appointment of Mr. R. H. Parkinson, formerly Supervisor of Welfare Services in the Regina Regional Office, as Chief Supervisor of Welfare Services, and his replacement by Mr. G. P. Allen who previously was the Supervisor of Welfare Services in the Halifax Regional Office. Arrangements for the latter's replacement are already under way. Miss Norma O'Brien was appointed as Regional Director for Yukon and Northwest Territories, replacing Mr. W. F. Hendershot who is now full-time Executive Assistant to the National Director for Family Allowances and Old Age Security.

Expansion of Services and Accommodation

Beginning in July 1951 certain administrative services in the Regional Offices, such as the central registry, the mail and index units, the stenographers' pool and the supply and personnel units, had to be expanded to cope with the

dual requirements of family allowances and old age security; this necessitated acquiring additional space in most Regional Offices. On the other hand, the problem was minimized to some extent through the destruction of a large number of terminated Family Allowances files for the years 1945 to 1948 inclusive, for which action appropriate authority had been obtained. This move also made available a number of filing cabinets in the central registries of the Regional Offices.

Quarters in the new federal buildings in Victoria and Fredericton were provided for the Regional Offices in those cities towards the end of the fiscal year and arrangements are at present under way for the Regional Office in Regina to be moved to more suitable accommodation in the federal Income Tax building in that city. It could be said, therefore, that, with the exception of Toronto and Winnipeg, where accommodation is not altogether suitable, all offices are now adequately housed.

Overpayments

The last fiscal year has seen the largest reduction in overpayments of family allowances since the peak in February 1948 when total overpayments stood at \$506,734. As at March 31, 1952 outstanding overpayments for the entire period since the inception of Family Allowances in July 1945 totalled \$371,708 as compared to \$438,401 a year ago; a net reduction of \$66,693, or a net reduction of \$135,026 since the peak in February 1948.

The notable overall decrease in overpayments since March 31, 1951 is due to the substantial drop in new overpayments discovered and set up during the fiscal year, i.e. from \$449,644 to \$310,660 (see Table 27, page 148). The greater percentage of overpayments set up during the year were recovered currently by deductions from continuing Family Allowances accounts while the remainder are recoverable by collection from the parents. It follows therefore that total collections on account of overpayments during 1951-52 were substantially lower than in 1950-51; i.e. \$377,353 as compared to \$462,417.

There are varying causes for overpayments, the principal ones being: (a) children working for wages, (b) children not in attendance at school, and (c) non-maintenance by the parents. All three account for roughly 70 per cent of all new overpayments set up. Every possible effort, by way of public information, direct correspondence and otherwise, is made to prevent overpayments arising and equal efforts are made to reduce them once they have occurred.

The sum of \$371,708 outstanding as at March 31, 1952 is made up as follows: (a) \$76,702 or 20·7 per cent, which is being recovered currently from active accounts; (b) \$184,569 or 49·7 per cent, which is recoverable from parents whose accounts have terminated, and (c) \$110,437 or 29·6 per cent, which is considered uncollectable (see Table 25, page 146). When considered in relation to the \$1,900,000,000 paid in Family Allowances since July 1940, the amount of overpayments outstanding is extremely small.

Birth Verification

A review of Table 28, page 150, will show that the number of unverified births increased from 116,569 as at March 31, 1951 to 137,949 as at March 31, 1952. Normally, the number of unverified births at any time should not be more than 125,000, provided the monthly birth indices prepared by the Dominion Bureau of Statistics are supplied to the Regional Offices not later than four or five months following the month of birth for which they were compiled. In the past fiscal year, there has been considerable delay in the supply of

monthly birth indices (in some offices as much as ten months) which was occasioned by the heavy burden placed on the Dominion Bureau of Statistics in computing and finalizing the results of the 1951 Census. Assurance has been given, however, that this situation is temporary and that the flow of monthly birth indices will return to normal in the not too distant future. Otherwise, birth verification no longer presents a problem.

School Attendance and Employment for Wages

Allowances are payable, under the Family Allowances legislation, only if a child's attendance at school is satisfactory in accordance with the laws of the province where he resides and, if over school age, he is not working for wages. During the fiscal year 1951-52, allowances for 38,709 children were suspended because of unsatisfactory attendance at school or employment for wages, as compared with 36,845 in 1950-51.

It is rather difficult to determine the exact causes of this increase, since conditions vary from province to province. The school-leaving age differs among provinces; arrangements for the reporting of unsatisfactory school attendance by provincial and local school authorities vary considerably from one province to another, those reached in some cases being considerably better that in certain other cases; more complete reports of children working for wages are received by some Regional Officers than by others; opportunities for employment show a marked difference from one area to another.

Certain general conclusions may be drawn, however. Arrangements for obtaining information regarding both unsatisfactory school attendance and "employment for wages" have improved generally; parents are becoming more and more familiar with the requirements and are voluntarily reporting in a larger number of cases; the use of a special questionnaire by Regional Offices, described in the Annual Report for the previous fiscal year, has become more widespread; and, finally, the school enrollment across Canada continues to increase, it being borne in mind that the Canadian birth-rate rose in the immediate post-war years, the peak being reached in 1947.

Again during the past year, indications were that the loss of family allowances is one of the most effective deterrents to unlawful absences from school and to juvenile work.

Separation Allowances, Navy, Army and Air

During the past year the Division agreed, at the request of the Department of National Defence, to assist in the checking of application forms received from service personnel in connection with the increased rate of separation allowances. These forms are received in Regional Offices under cover of nominal rolls. The claimed birthdates of children are checked with Regional Office records and the forms marked accordingly. In addition, information is placed on the form as to whether the serviceman's wife is in receipt of family allowances. The forms are then returned to the Department of National Defence.

At the outset, this undertaking was quite onerous, as there was some backlog of forms to be checked, but as at March 31, 1952, this work was on a more or less current basis.

Prosecutions

When \$320,880,854 in Family Allowances is distributed annually to 1,966,721 families on the sole basis of an application filled out by the person desiring the allowance, it is gratifying that there has been so little fraud.

When Family Allowances were first put into pay, the best methods for uncovering cases of fraud were not known, and it was only after experience that adequate procedures were devised. As a result, a backlog of cases built up through this early period.

When it became obvious that criminal proceedings would have to be initiated, procedures were laid down for prosecutions and the first criminal action was started in May 1947. As methods improved, the number of cases ready for prosecution grew, and it is for this reason that the number of prosecutions each year has increased steadily since May 1947. The backlog of cases which built up in the early years has nearly been disposed of and at the end of the next fiscal year a sharp drop in the number of prosecutions is expected.

Since May 1947, there have been 184 prosecutions initiated of which 136 were successfully completed, 19 were abandoned and 29 are pending. In one case, the person prosecuted was acquitted. In six cases, action was taken for fraud under the provision of the Criminal Code; the remainder of the prosecutions were for infringement of the Family Allowances Act and were, for the most part, for the following reasons: non-maintenance—45 cases; duplicate accounts—29 cases; fictitious children—27 cases; and deceased children—13 cases.

During the fiscal year ended March 31, 1952, 92 prosecutions were initiated, of which 55 resulted in convictions, 12 were abandoned, and 25 are pending.

The sentences given were fines, imprisonment, or both, with fines being imposed in the majority of cases. Up to January 31, 1952, \$10,160 has been paid in fines and \$21,806 recovered on overpayments as a result of this action. The total amount of overpayments arising out of cases of fraud in which action was taken was \$42,238.

Not only successful prosecutions but also thorough investigations by the Royal Canadian Mounted Police contribute to the effectiveness of criminal proceedings as a deterrent in preventing fraud. The two together no doubt account for there having been so few cases of fraud in the seven years that Family Allowances have been paid.

Transfers of Accounts between Provinces

Transfers of Family Allowance accounts from province to province reached an all-time high in the past fiscal year; a review of Table 30, page 152, will indicate that, as has been the case in previous years, there is a larger number of persons entering the provinces of Ontario and British Columbia than are leaving those provinces. It is interesting to note that this influx of population was quite prevalent in the province of Alberta until the fiscal year just ended during which 45 more families moved out of the province than in. With the exception of the province of Quebec, where transfers in and out were about equal, the remaining provinces continued to show an outward trend in the movement of families; the most marked being in Saskatchewan and New Brunswick, followed by Nova Scotia and Manitoba. (It should be noted that the figures in Table 30, page 152, refer only to families in receipt of Family Allowances.)

Conferences

During the fiscal year a special conference of Regional Directors of Family Allowances was held in Ottawa. The main purpose of this conference was to acquaint Regional Directors with the broad lines of policy in respect to the introduction of the Old Age Security program and on the setting up of the appropriate procedure for the initial registration of pensioners under the legislation; however, policy, methods and procedures in respect of Family Allow-

ances were also discussed with a view to more uniformity in interpretation and application of policy and for improvement in the general administration of the Family Allowances program.

Welfare

During the fiscal year 1951-52 a total of 18,900 cases involving social problems were referred to the Welfare Sections in the Regional Offices. Most of these cases are brought to attention by the families themselves and by the public and private agencies throughout the country, whilst the remainder are referred by private individuals or originate in the administrative units of the Regional Offices during the process of studying eligibility.

The types of problems involved are, in order of frequency, as follows:

(a) those growing out of the break-up of the home and where both parents claim Family Allowances; (b) changes in custody of the children; (c) chronic non-attendance at school caused by social problems; (d) misuse of Family Allowances; and (e) other miscellaneous social problems in relation to Family Allowances.

Social Workers in the Regional Offices review each case referred and make a recommendation as to the action to be taken, such as a change of payee, the appointment of an administrator or the referral to a welfare agency for casework service. Of the total number of cases dealt with in the fiscal year 1951-52, slightly more than 4,000 necessitated a "change of payee", 180 required the appointment of an administrator, 640 were referred to a social agency for "casework service", 8,200 necessitated some other type of administrative action and 6,400, or almost one-third, required no change.

A very important feature in so far as the welfare side of the Family Allowances program is concerned is the work involved in the appointing of administrators where it is discovered that Family Allowances are being misused. This is an area where the skills of the social workers can be used to advantage. While the actual cumulative number of accounts under administration, 463, is extremely small compared to the total number of accounts in pay, the appointment of the administrators in these cases represents a good deal of work. In all such cases a complete case history is secured, either from a social agency in the community or from one of the trained social workers employed in the Regional Offices. In each instance the report is carefully evaluated so as to be completely fair to the parent. It is only as a last resort and where no other solution appears workable that a recommendation is made to have an administrator appointed. Wherever possible it is the desire of the Division to continue to pay Family Allowances to the mother.

While it has been necessary in some areas to have investigations made by Family Allowances social workers, the general policy has been to seek the co-operation of local agencies, both public and private, and they have given extensive and invaluable service. In the fiscal year ended March 31, 1952, 2,499 such investigations were made through the Provincial Departments of Welfare and 1,312 through other welfare agencies.

This year has witnessed a further growth in the number of children for whom Family Allowances are being paid to child-caring agencies. During the year Family Allowances were paid to such agencies on behalf of some 40,000 children. These agencies are paid Family Allowances as a "parent". However, a measure of control is retained by this administration with regard to how the moneys are to be spent. In general an agency is permitted to spend up to \$4.00 per month in order to procure or retain a good foster home. That portion of the child's allowance which remains is placed in a trust account and may be used to provide extras for the child which are not normally provided by the agency.

III. OLD AGE SECURITY

Introduction

There have been a number of developments over the past twenty-five years which have reflected an increasing awareness of the needs of the senior citizens of this country. Most notable was the Old Age Pensions Act of 1927 which provided pensions to persons seventy or over through federal-provincial partnership and co-operation. Through the years a series of amendments to the original legislation extended the benefits and coverage of the Old Age Pensions Act with the result that this measure has made an important contribution to the well-being of the country's aged citizens.

An all-party parliamentary committee was established in 1950 to study the problems of Old Age Security. This committee unanimously recommended to Parliament that a pension of \$40.00 a month should be paid to all persons seventy years of age or over, with eligibility for the pension to be based solely on age and a suitable residence qualification. The Old Age Security legislation was designed to implement this recommendation of the parliamentary committee.

The Old Age Security Act embodies features which place this legislation in an outstanding position in comparison with similar programs throughout the world.

Most significant is the fact that the Old Age Security Pension is a *universal* pension. In some countries certain occupational groups are excluded entirely while other persons receive restricted benefits related to the number of contributions they have made over the years. The Old Age Security Act provides for a pension to *all* persons seventy years of age or over who meet the residence requirement.

The Old Age Security program has also been designed for simplicity of administration. This is made possible not only by the universal coverage feature and the absence of means test requirements but by the method of meeting the costs of the pension. In those countries where benefits are related directly to contributions from the individual and from the employer, effective administration requires the maintenance of a large volume of records. Under the Canadian plan there is no necessity to keep a record of the individual contributions in relation to benefits since the cost of Old Age Security Pensions is considered as a charge on the nation's current production and is covered through moneys received from sales tax, income tax and tax on corporate profits.

Historical Review

In the early months of 1951 it was announced that the Government intended to bring before Parliament legislation to provide for an Old Age Security Pension to be paid beginning January, 1952. The Family Allowances Division, which administers the Family Allowances Act, was assigned the responsibility of setting up the necessary machinery to administer the proposed legislation. The Regional Family Allowances offices, located in the capital city of each province, became the regional offices for the Old Age Security program as well. The Family Allowances organization lent itself readily to the addition of the Old Age Security work since many of the operations involved in Old Age Security are similar to those in the Family Allowances administration.

One of the first problems to be faced was to arrange for the initial registration of applicants for the pension. It was estimated that there would be approximately 675,000 persons seventy years of age or over in Canada as of December 31, 1951, and of this group some 300,000 were already receiving a pension under the Old Age Pensions Act. It was decided, therefore, to arrange first for the transfer of persons receiving a pension under the Old Age Pensions Act, to be followed by registration of persons who had not been in receipt of the Old Age Pension.

During the month of July, 1951, the names of persons in receipt of Old Age Pensions were placed on tentative Old Age Security rolls so that payment of Old Age Security Pension could begin promptly with the month of January, 1952. The work of transferring these names was carried out by teams made up of Old Age Security Administration and Treasury representatives who checked each file held by the provincial authority to see that the eligibility requirements for the Old Age Security Pension had been met. This work was greatly facilitated by the co-operation received from the provincial authorities in all provinces. Immediately after this tentative transfer of pensioners from the Old Age Pensions' rolls had been completed, the persons concerned were notified that they would receive the Old Age Security Pension effective January, 1952, and that no action by them regarding application for such pension was necessary.

In July, 1951, an intensive publicity campaign was begun with the object of securing applications from those persons who would be eligible for an Old Age Security Pension by January, 1952, but who were not already in receipt of a pension under the Old Age Pensions Act. Application forms were placed in all post offices throughout Canada and every effort was made to have applicants send in the completed application form to the appropriate Regional Director as soon as possible. Through the media of newspapers, posters, and radio, the necessity for early registration was stressed. In all the advertising it was pointed out that early application would help to avoid delay in payment which was to begin at the end of January, 1952. The results obtained by this publicity were excellent. By the end of September, 1951, 250,000 application forms had been received in the regional offices. Applications continued to come in steadily during the rest of the year and at the end of December, 1951, applications had been received from 342,169 persons.

The Old Age Security Act received Royal Assent on December 21, 1951, and the Old Age Security Regulations came into effect December 28, 1951. The first payment of Old Age Security Pensions was made at the end of January, 1952, when 617,600 pensioners were paid the amount of \$24,704,000. They included 308,310 persons who had been transferred from Old Age Pensions' rolls and 309,290 persons who had applied directly for an Old Age Security Pension.

Staff

The staff requirements for Old Age Security Pensions have been greatly influenced by the fact that the administration of Old Age Security is carried out jointly with the Family Allowances administration. The National Director of Family Allowances acts also as Director of Old Age Security and each Regional Director of Family Allowances has assumed also the duties of Regional Director of Old Age Security. Wherever possible Family Allowances services have been used for Old Age Security, as for example, in mail reception, central registry, stenographic pool and welfare services. In some cases it

has been necessary to add to the staff of these sections in order to handle the extra work. Nevertheless, the number of extra staff was much less than the number that would have been required for an independent establishment.

Another factor in determining the staff requirements was the decision to use Family Allowances and Old Age Security personnel extensively in overtime work on Old Age Security administration during the period of initial registration. In the Toronto office alone the overtime between July 1, 1951, and March 31, 1952, amounted to 28,466 hours for Family Allowances personnel and 3,629 hours for the Old Age Security staff. A corresponding amount of overtime was worked in the other regional offices.

Because of the use of joint services with Family Allowances administration and the overtime work by Family Allowances and Old Age Security personnel, the number of new employees required was relatively small. There was a total of 123 continuing positions added to the establishment of the regional offices. This compared with 694 established positions of a similar character required for Family Allowances. In addition, in some provinces it was found necessary to employ casual help to assist in the processing of the large bulk of applications received early in the Old Age Security program. The number of continuing employees and casual help for each province, as of March 31, 1952, is shown below.

Province	Continuing	Establishment	Casuals
Newfoundland		5	0
Prince Edward Island		3	0
Nova Scotia		8	2
New Brunswick		7	2
Quebec		25	0
Ontario		31	28
Manitoba		10	0
Saskatchewan		10	4
Alberta		10	0
British Columbia		13	3
Yukon and Northwest Territories		1	6
		123	45

Accommodation and Equipment

The introduction of the Old Age Security program made it necessary to acquire some additional space and equipment for the regional offices. In a number of the regional offices, additional space was obtained in the same building in which the regional office is located. This was the situation in St. John's, Halifax, Quebec City, Regina and Edmonton. In Toronto, additional space was obtained in an adjoining building. It was necessary to secure separate quarters for Old Age Security work in both Fredericton and Victoria. No additional space was obtained for the Charlottetown and Winnipeg offices. However, by the end of March there were indications that the present space in the Winnipeg office would not continue to be sufficient to accommodate the extra staff and equipment needed for the Old Age Security work.

Eligibility Requirements of Old Age Security Legislation

The Old Age Security Act and Regulations provide for the payment, on application, of a pension of \$40.00 per month to a person who is seventy years of age or more and who meets the residence requirements. There is no means test qualification. Therefore, the two factors of eligibility which must be established concern age and residence.

Proof of Age

Before an application for Old Age Security Pension can be approved for payment it is necessary to have satisfactory evidence that the applicant is seventy years of age or more.

There are a number of ways by which an applicant may prove his age. A birth or baptismal certificate is considered the best evidence but where this type of proof is unavailable the Department is prepared to consider a wide variety of other kinds of evidence. Consideration is given to such items as marriage certificates, insurance or government annuity certificates, communion certificates, confirmation records and other church records, passports and naturalization documents, immigration records, pension and superannuation records, employment records, educational documents, newspaper and magazine clippings, letters, photographs, medical documents, public records, military service records, homestead records, membership records, family Bible and other privately-kept records.

If the applicant is unable to present any type of evidence whatever, he is asked to complete a form authorizing the Regional Director to obtain a search of the census records. Through the co-operation of the Bureau of Statistics it has been possible to assist many applicants to prove their age by reference to the census records. Also, arrangements have been made with the Department of Labour whereby the Old Age Security Division can request a search of the 1940 National Registration records for verification of age. This source has helped many applicants who lack other suitable evidence.

At the beginning of the Old Age Security program there was some concern regarding the difficulty which might be faced by a number of applicants in obtaining satisfactory evidence of age, particularly since many births which took place seventy or more years ago were not registered with the provincial authorities. It has been the policy of the Division to assist applicants in every way possible to prove their age. The measure of the success of this policy may be seen in the relatively small number of applications which have been deferred for lack of proof of age. Reference to Table 31, page 153, will show that as of March 31, 1952, the total number of deferred applications relating to payment for January and February, 1952, is only 2,389 out of a total of 341,112 direct applications for the pension. Not all of the deferred applications are for lack of satisfactory proof of age. In some cases there is a problem regarding residence or some difficulty in obtaining a satisfactorily completed application form.

Residence

To be eligible for the Old Age Security Pension the applicant must have resided in Canada for the twenty years immediately preceding the day on which the application is approved, or failing that, the applicant must meet the following requirements:

- (a) presence in Canada prior to the last twenty years for an aggregate period at least equal to twice the aggregate periods of absence from Canada during those twenty years, and
- (b) residence in Canada for at least one year immediately preceding the day on which the application is approved.

The application form for Old Age Security Pension has several questions relating to residence. The applicant is required to give a history of residence in Canada and of absences from the country. In addition he is asked to give the names and addresses of two persons, not members of his family, who have

knowledge of the facts of residence as stated by the applicant. Applicants who were born outside Canada must state the date and place of entry to Canada.

In most cases applicants for the pension have been living in Canada for a sufficient length of time to meet the residence requirements. It has been found necessary to disallow the claim for pension on the grounds of residence in a relatively small number of cases. In many of these cases it will be possible to approve the application at a later date when the residence requirements have been met.

Administration of Pension

The Old Age Security legislation provides that the pension cannot be assigned, transferred, or pledged to meet a debt. The Act and Regulations also limit the authority of the departmental officials very narrowly with respect to their right to take control of the pension cheque away from the individual and make it payable to someone else.

In accordance with the legislation the pension is paid directly to the individual pensioner as a matter of right, to be disposed of by him on his own responsibility, except in those cases where, because of illness, infirmity, or some other reason, it can be shown that the pensioner is incapable of managing his own affairs. Such reasons as indigency or receipt of maintenance from public funds are not considered sufficient cause to pay the pension to another person or agency on behalf of the pensioner. In order to establish the incapability of the pensioner to manage his own affairs it is necessary to receive satisfactory evidence from a doctor, clergyman or lawyer who has been handling the affairs of the pensioner. Where satisfactory evidence of incapability is produced the Director may pay the pension to an administrator, to be expended for the benefit of the pensioner.

The number of Old Age Security cheques paid to administrators in March, 1952, was 22,820, which is 3.5 per cent of the total of 643,013 cheques issued in that month.

Welfare

It is expected that in the administration of Old Age Security Pensions there will be welfare problems of a somewhat different nature than those involved in the Family Allowances program. The social work staff now employed in the welfare section of the Family Allowances office is also being used for Old Age Security work. Future staff requirements will be determined on the basis of the work-load as it develops.

One area where professional social workers are of great assistance is in the assessment of requests to have the pension paid to a person other than the pensioner. The social worker is able to go behind the original request and determine whether the pensioner is actually incapable of handling his own affairs or whether the request is merely made because someone is of the opinion the pensioner is misspending his money or because someone is interested in getting at least a part of the proceeds of the pensioner's cheque. In the light of the policy that the cheque is to be paid to the pensioner unless incapability is shown, it is felt the use of social workers in this area will help to uphold the interests of the pensioner.

Another phase of the program in which the skills of social workers are being utilized is in the liaison with institutions caring for older persons. It is felt that social workers can best interpret policy to institutions of this kind. Also, because of their understanding of people, they will be most appreciative of the problems faced by the administrators of such institutions.

It is expected that numerous requests for services not provided by this Department will arise. When this occurs the regional office social work staff will make the necessary referrals to social agencies who are equipped to assist with the particular problem raised.

Estates of Deceased Pensioners

Under the Old Age Security legislation the pension is payable for the month in which the pensioner dies. Since the Old Age Security cheque is issued at the end of each month, in the event of death there is nearly always a cheque which remains uncashed by the pensioner. This cheque is returned to the issuing office and steps must then be taken to determine the proper person to whom the cheque should be reissued. In each case it is necessary for the Regional Director to ascertain whether there was a will or administration of the estate. If it is found that there is an executor or administrator the cheque is made payable to the estate of the late pensioner. Where there is no executor or administrator the Regional Director must designate a person or agency to receive the cheque on behalf of the deceased pensioner. In many cases this procedure involves considerable correspondence and investigation before final disposition of the cheque can be made. An indication of the amount of work involved in this area may be seen by reference to Table 31, page 153, showing a total of 4,325 deaths reported in the month of March, 1952.

Indians

A noteworthy feature of the Old Age Security legislation is the fact that Indians are eligible to receive the Old Age Security Pension on exactly the same basis as other persons. This is in keeping with policy in other areas whereby the Indian is given the same rights and privileges as other Canadians.

Indians were excluded from the benefits of the Old Age Pensions Act but the Department of Citizenship and Immigration did pay an allowance to aged Indians who were seventy years of age or over and who met certain other requirements. Arrangements were made with the Department of Citizenship and Immigration whereby approximately 4,200 persons who had been in receipt of the Allowance to aged Indians were transferred to a pension under the Old Age Security Act without the necessity of requiring these persons to complete the usual application form.

Application for Persons Receiving Old Age Assistance

The Old Age Assistance Act provides payment of a pension to persons who have reached the age of sixty-five or over and who meet the other eligibility requirements. Arrangements have been made with the provincial authorities so that, when the pensioner approaches seventy years of age, the province makes application for the Old Age Security Pension on behalf of the Old Age Assistance recipient. This provides continuity of payment and relieves the pensioner from the necessity of completing the usual Old Age Security application form.

Costs of Administration

The following table shows the administrative costs of the Old Age Security program for the fiscal year 1951-52:

Administrative Costs	1951-52	
Department of National Health and Welfare		478,000
Department of Finance (Treasury) Department of Public Works	\$	304,223 17,782
Total	\$	800,005
January-March, 1952 Percentage of Administrative Costs Compared to	\$76,066,834	
Old Age Security Payments		1.05%

It should be noted that the administrative costs for the period under review are abnormal because of the mass load of registration and the consequent necessity for extensive overtime work and employment of casual labour. It should also be noted that, whereas the administrative costs are related to the nine months from July, 1951, to March, 1952, the Old Age Security payments are only for three months, January, 1952, to March, 1952.

Conclusion

The reception and approval of a large number of applications for the Old Age Security Pension has been a heavy administrative task. The success of this initial phase of the program has been made possible only because of outstanding work on the part of regional office personnel and District Treasury Office staff.

IV. OLD AGE PENSIONS

Changes in Pension Scheme

Extensive changes were made in the scheme for paying old age pensions provided for by the Old Age Pensions Act, following the recommendations made by the Parliamentary Committee on Old Age Security referred to in the report for the last fiscal year. The recommendations were that persons seventy years of age or over who fulfilled certain residence requirements be paid a pension of \$40 a month by the federal government and that assistance of \$40 a month, subject to an eligibility test, be provided for persons over the age of 65 not eligible for the universal pension, the cost to be shared equally by the federal and provincial governments.

The first recommendation was brought into effect by The Old Age Security Act and the second by The Old Age Assistance Act. At the same time that Parliament passed the latter Act, provision was made by a separate Act, entitled The Blind Persons Act, for the payment of allowances, subject to an eligibility test, to blind persons over the age of 21 years. Since 1937 the Old Age Pensions Act had provided for the payment of pensions to blind persons, the federal government paying, as in the case of old age pensions, 75 per cent of the cost and the provinces paying the remaining 25 per cent. This basis was continued for paying the cost of allowances under The Blind Persons Act. The three new Acts came into operation on January 1, 1952.

Operation of Old Age Pensions Act Concluded

After being in force for almost twenty-five years the Old Age Pensions Act ceased to operate on December 31, 1951, so far as federal payments to the provinces were concerned. By that date the federal government had paid out, as federal contributions to the provinces for old age pensions and pensions in respect of blindness, more than \$800,000,000. The total of the federal and provincial shares, not taking into account supplemental allowances provided by certain provinces, was more than \$1,000,000,000. Up until 1931 the cost of pensions was shared equally by the federal and provincial governments. By an amendment to the Act in that year the federal government assumed responsibility for 75 per cent.

The maximum pension provided for in the original Act was \$20 a month. This amount was increased to \$25 in 1943, to \$30 in 1947 and to \$40 in 1949. During the same period the maximum income allowed, including pension, rose from \$365 a year to \$600 for an unmarried person and from \$730 to \$1,080 for a married couple. Higher amounts were allowed for blind persons and sighted persons with blind spouses.

Persons of seventy years and over who were in receipt of pensions under the Old Age Pensions Act as at December 31, 1951, were automatically taken over by the administration of The Old Age Security Act as from January 1, 1952. As at December 31, 1951, there were 308,825 persons receiving old age pensions and 11,335 receiving pensions in respect of blindness. Of the total number of blind pensioners, 3,212 aged 70 and over were transferred to the administration of The Old Age Security Act and the remainder taken over by provincial administrations as recipients of allowances under The Blind Persons Act.

The provinces had to deal with a number of cases where applications for pension under the Old Age Pensions Act made prior to December 1, 1951, had not, for one reason or another, been completed. To ensure that such cases

could be handled in the normal way, The Old Age Security Act provided for the repeal of the Old Age Pensions Act on a day to be fixed by proclamation of the Governor-in-Council. The Act had not been repealed as of March 31, 1952.

Old Age Assistance

The plan for paying old age assistance follows the lines of the plan for paying pensions under the Old Age Pensions Act. The income requirements, however, are more generous. Under The Old Age Assistance Act the maximum income allowed in the case of an unmarried person is \$720 a year and in the case of a married person, \$1,200 a year. The maximum assistance to which the Government of Canada is authorized to contribute is \$40 a month. Residence for the twenty years immediately preceding the date of the proposed commencement of pension is required, with provision being made in both the Act and the regulations for certain cases where there was an absence from Canada within the twenty year period.

By March 31, 1952, or shortly after that date, all provinces and the North-west Territories had entered into agreements with the Government of Canada under the provisions of The Old Age Assistance Act. Ten of the agreements were effective from January 1, 1952, the one with Newfoundland coming into operation from April 1, 1952. The maximum assistance specified by the provinces in their agreements was \$40 a month except in the case of Newfoundland which specified \$30 a month. The Government of the Yukon Territory had not made an agreement under the Act.

The federal contribution for old age assistance is payable monthly. During the months of January, February, and March, 1952, the provincial authorities were unable to deal with applications on a current basis and consequently the amounts paid out for each of the three months do not give an accurate indication of the ultimate extent of operations under the Act. Federal contributions to the provinces for January amounted to \$386,613.12, for February, \$776,988.52, and for March, \$1,113,636.85, making a total for the last three months of the fiscal year of \$2,277,238.49. The number of recipients as at March 31, 1952, was 41,601.

Allowances for Blind Persons

Allowances under The Blind Persons Act are handled in practically the same way as were pensions in respect of blindness under the Old Age Pensions Act. The age requirement of 21 years is the same, but the residence requirement of 20 years has been reduced to 10 years. The amounts of maximum income allowed, including the allowance, have also been increased being \$840 a year for a single person and \$1,320 a year for a married person. In the case of two blind spouses, the amount is \$1,440. The amounts under the Old Age Pensions Act were \$720, \$1,200 and \$1,320.

Separate agreements under The Blind Persons Act have been made by the Government of Canada with the governments of the ten provinces and the Northwest Territories. All agreements were effective from January 1, 1952, and provide for the payment of a maximum allowance of \$40 a month. The Government of the Yukon Territory has not entered into an agreement but has continued to pay, under the authority of the Act, two (2) blind persons granted pensions in respect of blindness under the Old Age Pensions Act.

For the last three months of the fiscal year 1951-52, federal contributions totalled \$721,449.24. The monthly amounts varied little, being \$239,729.92 for January, \$240,905.41 for February and for March \$240,813.91. The total number of recipients as at March 31, 1952, was 8,079.

Tables 32 and 33 (page 154) show the amounts paid by the Government of Canada to the provinces and to the Yukon Territory for old age pensions and pensions for blind persons under the Old Age Pensions Act to March 31, 1952—also amounts paid by the Government of Canada to old age and blind pensioners in the Northwest Territories.

Tables 34 and 35 (page 155) show statistics as of December 31, 1951, the date on which regular quarterly contributions by the government of Canada under the Old Age Pensions Act were discontinued.

Table 36 (page 156) shows the amounts paid for old age assistance by the Government of Canada to the provinces during the last three months of the fiscal year, and relevant statistical information.

Table 37 (page 156) shows the amounts paid for blindness allowances under The Blind Persons Act to the provinces, the Yukon Territory and the Northwest Territories during the last three months of the fiscal year, and relevant statistical information.

V. PHYSICAL FITNESS

The Physical Fitness Division continued to act as the agency for administering the fitness and recreation services made available under the terms of the National Physical Fitness Act. The position of National Director remained vacant during the current fiscal year.

During the fiscal year 1951-52, in accordance with agreements entered into by the provincial departments concerned, the Provinces of Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Ontario, Prince Edward Island, Saskatchewan and the Northwest Territories co-operated with the federal government under the terms of the National Physical Fitness Act.

Initiated on a limited basis in 1944, provincial fitness and recreation services have been broadened each year to include a wider variety of activities. The steady increase in citizen demands for opportunity to participate continues in all aspects of Fitness and Recreation programs. There has not been a comparable increase in the provision of facilities and specialized program services to meet these demands.

Administration

The Division continued to provide a variety of professional consultative and informational services for the assistance of provincial government departments and national organizations. It acted as a clearing house for the dissemination of information on recreation, fitness, physical education, community centres, drama, sports, the organization and administration of community and specialized programs, and related matters. The actual organization and direction of recreation and fitness projects continued to be a provincial and local responsibility and consequently the Division did not operate an activity program. Close liaison was maintained with other countries and with the Commonwealth in particular, thus facilitating an exchange of publications and information on the latest developments abroad.

During the fiscal year 1951-52, a total of \$152,249.71 was paid in respect of assistance to the provinces under the terms of the Act. Of this sum, \$83,636.70 was paid in respect of claims submitted for the fiscal year 1950-51. Claims have yet to be received from the provinces of Ontario, Manitoba and the Northwest Territories for grants in respect of the fiscal year 1951-52.

The total sum available for the administration of the Division during the current fiscal year was \$110,388.15; and of this amount the sum of \$77,085.00 was expended, leaving an apparent balance of \$33,302.31. These amounts are not subject to the provisions of "The Consolidated Revenue and Audit Act", and therefor do not lapse at the end of the fiscal year. The balance has already been committed and for the greater part will be expended during 1952-53 on projects started during the fiscal year 1951-52.

It will be noted that the total provincial expenditures on Fitness and Recreation programs during the fiscal year amounted to \$825,237.22. This sum includes the amount of the Federal Grants made to assist the provinces. The net provincial expenditure was \$669,417.95 which, in all but three cases, exceeded that which was necessary to match the federal grant. In six out of the nine participating provinces, provincial expenditures have increased since the previous financial year.

Demands on the services of the Division during the fiscal year have indicated a definite increase in activity in a number of special fields, such as recreation for young children and older age groups, institutional programs and employee recreation. These particular aspects of recreational services require

specialized services. At present there is a lack of trained personnel in the recreation field. To some extent this scarcity is due to the lack of security and professional recognition as compared with that existing in relation to the older professions, such as education and public health.

Informational Materials

Information relevant to fitness, recreation, physical education, cultural activities, community centres, reports on new projects and research in Canada and other countries, new procedures and developments, have been issued in bulletin form to Council members, interested organizations and individuals. In all, 159 subjects in the English language were prepared, and 41 subjects in the French language. The distribution of informational materials for 1951-52 was: Duplicated materials—88,227 (English) and 6,419 (French); printed materials—29,968 (English) and 9,079 (French) making a total of 133,693 copies both printed and mimeographed, English and French.

Some of the more important publications and reports produced by the Division during the year were: Here's How To Do It—Supplement No. 1, (English only); Prelude to Performance, Simplified Staging (French only); Hockey Coaching, Play for Preschoolers, Posture's Important When You're in Your Teens, Simplified Stage Lighting, Let's Co-operate for the Good of Sport, National Survey of Recreation in Canadian Communities, A Citizen's Committee in Action, Proceedings—Professional Schools Conference and Supplement, Preliminary Report—Aquatic Standards Conference, Proceedings—First National Employee Recreation Conference. Reprints were obtained of the following: Simplified Stage Lighting, Hockey Coaching, Here's How To Do It—Supplement No. 1.

Production of Audio-Visual Aids

During the year, the filmstrip "Simplified Stage Lighting", which was in production at the end of the last fiscal year, was completed and released for distribution.

Production has been started on a co-ordinated package of visual aids on "Weaving". It consists of a short introductory film, three filmstrips and a number of loop-films. This combination is, as far as is known, the first of its kind. The various elements are designed to be complementary and to be used together. The resultant package should do a more thorough job than a single longer film and will be considerably less expensive.

The Division obtained special recognition when the filmstrip "Simplified Staging" was given one of ten annual awards from the United States publication "Scholastic Teacher", one of the largest professional educational journals on this continent. The basis of judging is "all-round excellence, originality, production to a purpose, and stimulation to mental activity". This filmstrip was produced by the National Film Board with the technical direction of the Division.

The films produced by the Division in previous years continue to be in demand and enjoy satisfactory sales. "Fitness is a Family Affair", in particular, has been the subject of favourable comment. For example "The Film Monthly" states—"This unassuming film, dealing with a major problem of our time, should be seen by as many people as possible. It may really help".

The film "On Stage" has also been the subject of much favourable comment. The "Film User" for instance says—"An inspiring and practical film for young people; recommended for screening to any small community organization". The Scholastic Teacher states—"If you are director for your school's plays, or for an amateur theatrical group, 'On Stage' is a film for you".

Preview Film Library Service

During the year, 13 blocks of visual aids totalling 48 titles (34 films, 10 filmstrips and 4 loop-films) were circulated within the provinces. On completion of the screening circuit, the visual aids are deposited with the Canadian Film Institute on extended loan for general rental at a minimum charge, part of which goes into a replacement fund.

NATIONAL COUNCIL ON PHYSICAL FITNESS

The Council met in Ottawa, April 10-12, 1951 and in Toronto, September 12-14, 1951. Mr. J. H. Ross, B.Sc., continued to serve as Acting Chairman of the Council.

The following committees have been established by the Council:—Aquatic; Awards; Coaching Schools; Conference on Key Recreation Personnel; Diploma Courses; Financing International Competition; Financial Policies; Folk Festivals; Job Analysis; Legislation; Program for the Advancement of the Fitness of the People of Canada,—Employee Recreation Conference,—Professional School Conference; Publications; R.C.M.P. Fitness Program; Research—History of Physical Education and Recreation in Canada; Sports Governing Bodies; Scholarships; Resolutions.

Diploma Course for Public Recreation Personnel

The Council has continued to concern itself with the establishment of a one year Recreation Diploma Course or Courses in Public Recreation. Invitations to consider establishment of such a course were sent to all Canadian universities. After considering a number of suggestions, preliminary arrangements have been made for the establishment of such a course in the University of British Columbia in the Fall of 1952.

Recreation Survey

Subsequent to the completion of the Recreation Survey which was carried on in co-operation with the Canadian Federation of Mayors and Municipalities and the Parks and Recreation Association of Canada, and which was undertaken on a sampling basis, the Council decided to continue and expand, on a national basis, a similar survey annually to include all municipalities in Canada, of a population of 1,000 or over. Survey forms were distributed to all communities concerned. In the survey based on 1950 data, information was particularly requested on total capital expenditures on facilities up to December 31, 1950, including land, to establish a point of reference for future surveys.

First National Conference on Undergraduate Professional Preparation

At the invitation of the National Council on Physical Fitness, a meeting of representatives of all Professional Schools in Canada granting degrees in Physical Education and/or Recreation was held in Toronto in September 1951. Continuing committees were set up in the following fields: Faculty, Course Content, Students, Facilities and Equipment, Practice Teaching and Field Work. Further reports will be made at later dates.

Employee Recreation Conference

Under the auspices of the National Council on Physical Fitness, a meeting of representatives of national organizations and agencies was held in Ottawa in January 1952 to discuss various problems connected with Employee Recreation.

The Conference established a continuing committee on Employee Recreation and made recommendations to the National Council on Physical Fitness for the establishment of training courses for voluntary leaders in this field.

Pan American Institute

On receipt of an invitation from the Canadian delegate to the Pan American Institute, the National Council on Physical Fitness authorized the Council's participation in the Canadian Committee and appointed the Acting Chairman as their representative.

National Amateur Athletic Achievement Award

The National Council on Physical Fitness approved the presentation of the National Amateur Athletic Achievement Award, as recommended by the Awards Committee, to Dr. Robert M. McFarlane of London, Ontario. The Council further asked the Awards Committee to consider broadening the scope of the Award to include other recreational activities.

Scholarships

Seven Post-Graduate Scholarships were awarded for study in Physical Education and Recreation: Mr. C. M. Bedford (Sask.); Mr. Jean Coutu (Que.); Miss Marion Henderson (B.C.); Mr. W. J. L'Heureux (Ont.); Mr. R. E. Wilkinson (Que.); Miss Joyce McLean (Sask.) and Miss Mona M. Russell (Ont.) advised the Council that they were unable to accept the Scholarship at this time.

Physical Fitness statistics will be found in Tables 38, 39 and 40, pages 157, 158, and 159.

CIVIL DEFENCE

Purpose

The purpose of Civil Defence is to minimize the effects of disaster upon the population of Canada and the property of the Canadian people. To do this, civil defence services are designed to reduce loss of life, to afford medical and other assistance to the civil population, to ensure that essential production will continue, to restore public utilities and services as quickly as possible and to mitigate the property damage that may be caused by enemy attack or disaster. To carry out a program of such magnitude requires the participation and resources of the entire nation. Civil Defence organization and planning, therefore, must be related to and based on the fundamental federal character of this country, which embodies a division of responsibility between federal, provincial and municipal governments.

Federal Responsibilities

Civil Defence, in its very essence, is the assurance of the maintenance of normal community services and, for this reason, the main operational responsibility, apart from overall plans, training and co-ordination, must fall on those local municipal agencies who carry the day-to-day responsibilities of maintaining the normal amenities of life in Canada's urban communities.

Since Civil Defence must centre on local organization and action, the role of the Federal Government is largely that of a guiding, directing and coordinating agency whose job it is to ensure that planning of adequate Civil Defence machinery is carried forward on provincial and local levels; that key personnel and instructors are trained in the various specialized fields; and that sufficient supplies of key materials and equipment required exclusively for Civil Defence purposes are made available on the operational level.

Federal civil defence functions became the responsibility of the Department of National Health and Welfare one month before the commencement of the fiscal year 1951/52. Up to that time, federal action in this field had consisted, mainly, of planning and co-ordination of provincial and municipal effort.

In August, 1950, a conference between the Minister of National Defence and ministerial delegates responsible for Civil Defence in the provinces formed a Federal/Provincial Advisory Committee on Civil Defence, the Chairman being the federal minister responsible for Civil Defence, with membership consisting of those provincial ministers having the same responsibility.

This Advisory Committee met for the second time on February 23, 1951, at the conclusion of which meeting Civil Defence passed over to the Department of National Health and Welfare. At this meeting, the Federal Government assumed the following responsibilities:

- (1) The provision of an advance warning system in co-operation with the provincial and local authorities.
- (2) The supply of sirens or other warning devices in municipalities that form part of a civil defence target area.
- (3) Payment of one-third of the cost of materials for standardizing hose couplings in order to increase interchangeability of fire-fighting equipment within a target area.

- (4) Provision of radiological and technical instruments, respirators and special protective clothing for designated civil defence workers in selected areas, in connection with atomic, bacteriological and chemical warfare defence.
- (5) The provision of stirrup pumps and auxiliary pumps for training purposes.
- (6) Stockpiling at strategic locations across Canada of such medical supplies and equipment as might be considered necessary.
- (7) The provision of civil defence staff courses and special courses for leaders and workers, for instructors on ABC defence and other technical matters, as well as the payment of travelling expenses to and from the courses and living expenses while in attendance.
- (8) The provision of training aids, manuals and badges for civil defence workers.
- (9) Allocation of officers of the armed forces to work closely with provincial authorities in the planning of civil defence programs.
- (10) Protection against sabotage of federal works and support for the provinces and municipalities in this respect. This, of course, is arranged through the R.C.M. Police.
 - (11) Research and development in civil defence matters.
- (12) Close co-operation with provincial and local authorities in the working out of all programs for civil defence.
 - (13) Co-operation with the United States and other countries.
- (14) Support by federal agencies and the armed forces in aid of local authorities in the event of an attack.
- (15) Civil defence organization within federal departments, the armed forces and other federal agencies.
 - (16) Public information on general civil defence policy.

Organization

The general policy is that the civil defence organization should be integrated within the framework of each level of civil government, with each level assuming its own responsibilities and with channels of communication established as follows:

(a) On matters of policy

The Minister of National Health and Welfare will deal with the provincial ministers responsible for civil defence;

(b) In the implementation of policy

The federal Civil Defence Co-ordinator will deal with the provincial Civil Defence Co-ordinator or Director;

(c) When policy has been established firmly

Matters of a technical, specialist or routine nature will be dealt with at the working level, e.g., federal and provincial health authorities will communicate directly with each other, keeping their corresponding civil defence authorities informed. For civil defence organizational and planning purposes, Canada has been divided into three specific types of area:

(a) Target Areas

Those centres liable to attack by reason of population density and industrial potential must be regarded as target areas and should have an organization capable of going into action immediately to minimize the effects of any possible attack.

(b) Mutual Aid Areas

The mutual aid area around the target area should be of sufficient size to provide aid to the stricken city and immediate refuge to distressed people.

(c) Mobile Support and Reception Areas

In a severe attack it is unlikely that the mutual aid area could provide the necessary accommodation for refugees, except for a few areas, and, in consequence, they must be sent into areas not included in (a) and (b) above. These are known as mobile support and reception areas. They would include most of the smaller cities and rural areas and their role in the event of an attack would be of great importance.

Since the beginning, it has been the federal policy to develop an organization with emphasis placed on training in an effort to achieve quality rather than quantity so that, in the event of an emergency, the organization would be capable of expanding without confusion or disruption. In pursuance of this policy, the federal government outlined a general pattern of organization for each level of government and inaugurated courses of instruction for organizers, to ensure uniformity.

Federal Organization

The organization at the federal level is as follows:

The Minister of National Health and Welfare is responsible for carrying out the approved policy of the Federal Government and for initiating new policy as required. Working through the Deputy Minister of Welfare, a federal Civil Defence Co-ordinator has been appointed to act in an advisory capacity to the Minister and Deputy Minister; to co-ordinate federal planning and action; to maintain liaison with the provinces and corresponding agencies in the United Kingdom, the United States and other countries; and to act as Chairman of the Civil Defence Co-ordinating Committee.

The Civil Defence Co-ordinating Committee has, as permanent members, representatives of the Departments of Agriculture, Finance, Labour, National Health and Welfare, Public Works, Resources and Development, Trade and Commerce, Transport and the R.C.M. Police. In addition, the Committee includes the Secretary of the Chiefs of Staff Committee and the Dominion Fire Commissioner. Representatives of agencies, such as the National Research Council and the Atomic Energy Control Board, are called in when matters affecting them are discussed. The Defence Research Board advises the Minister, the armed services and the Civil Defence Co-ordinator on scientific developments in this and other countries on matters concerning civil defence.

The staff of the federal Civil Defence Co-ordinator has been subdivided as follows:

(a) Operations and Training

This group has the responsibility of developing strategical and tactical operational plans, conducting training at federal schools and assisting provincial and local schools as required.

(b) Administration and Supply

This sub-division deals with problems of administration, including relationships with other federal departments and with provincial civil defence authorities. It is also responsible for the procurement of training aids and equipment through the Department's Purchasing and Supply Division.

(c) Other Service Activities

These include Civil Defence Health Planning; Civil Defence Welfare Planning; Communications and Transport (in conjunction with the Department of Transport); Plant and Animal Diseases (under the Department of Agriculture); Police Matters (under the R.C.M. Police); Civil Defence Research and Development (under the Defence Research Board and the Department of National Defence); Civil Defence Information Services.

(d) Civil Service Defence

In August 1951 a section was organized to be responsible for developing a program of Civil Defence preparations for the federal Civil Service. Instructors were trained by the federal government and they, in turn, have since trained 680 team and deputy team leaders. It is expected that approximately 5,000 civil servants will be trained by these leaders. Police and fire training is under the guidance of the R.C.M. Police and the Civil Service Health Division has undertaken the First Aid training. The purpose of this overall plan is to ensure that there is one organization in each building capable of being merged into an organization which the city of Ottawa may form in the event of a civil defence emergency.

Detailed information with respect to training activities, supplies and equipment, health planning, welfare planning, warning and communications, transportation and other service activities is given later in this report.

Provincial Organization

In the provincial field, each province has set up a civil defence organization within the frame-work of its own government and in accordance with the general pattern followed by the federal government. Each province has appointed a minister responsible for civil defence and a provincial co-ordinator or director. Provincial committees and advisory bodies parallel, closely, those of the federal organization. British Columbia, Alberta, Saskatchewan and Ontario have established provincial civil defence schools to assist in the training of key municipal personnel. Instructors in these schools have, for the most part, been trained at federal training centres and at federal expense.

Municipal Organization

At the municipal level, all target areas and communities of over 50,000 population, with one exception, have set up civil defence organizations in accordance with the general pattern at provincial and federal levels. In a number of centres, such as Halifax, Montreal, Windsor, Winnipeg, Edmonton, Vancouver and Victoria, local training schools have been established to train personnel now in the local organizations.

Federal Progress During the Fiscal Year 1951/52

The following is a summary of progress made by the federal government with respect to the responsibilities it has assumed in the field of Civil Defence:

(1) Provision of an advance warning system in co-operation with provincial and local authorities:

A national attack warning network has been established. Key points have been selected in all target areas and installations have been completed in over half of them.

- (2) The supply of sirens for municipalities forming part of a target area: Two hundred 5-horsepower, 2-tone sirens, complete with control apparatus, have been specially manufactured for all target areas.
- (3) Provision of radiological instruments and other technical equipment for designated civil defence workers in selected areas:

Over 70,000 respirators and substantial quantities of helmets, anti-gas suits and other protective clothing, together with a smaller quantity of radiation detection instruments, have been issued to the provinces for the use of civil defence workers in connection with ABC warfare defence.

(4) Standardizing hose couplings to increase interchangeability of fire-fighting equipment:

Although the federal government agreed to pay one-third of the cost of new hose couplings only, subsequent discussions with the provinces resulted in an extension of this offer to cover one-third of the total cost of standardizing hose couplings. Alberta and Ontario have taken advantage of this offer and commitments have been made in these provinces for federal expenditures of one-third of a million dollars.

(5) The provision of fire-fighting equipment for training purposes:

Over 4,000 stirrup pumps have been distributed for training purposes. A prototype of a self-propelled pumping unit has been ordered from the United Kingdom.

(6) Civil Defence organization within federal government agencies:

The Federal Civil Defence organization now has a strength of about 75, inclusive of the Training School staff. As previously mentioned, planning divisions have been established and specialized technical personnel have been engaged or assigned to deal with such problems as health planning, welfare planning, communications, training, transportation and public information.

(7) Training of key organizers and instructors for provincial and local programs:

During the past fiscal year 1,363 civil defence officials, instructors, nurses, doctors and technicians have attended federally-sponsored civil defence courses.

(8) Provision of training aids, manuals and badges for civil defence workers:

Various items of training equipment, such as stretchers, bandages, thunder flashes and field dressings, have been issued to the provinces. Certain technical equipment has been issued to selected civil defence workers and approximately 45,000 civil defence badges have been provided.

(9) Co-ordination with provincial and local authorities:

The closest co-operation has been maintained between the Federal and provincial governments in all phases of civil defence.

(10) Allocation of officers of the Armed Forces to work with provincial authorities:

An agreement has been reached with Army authorities under which liaison officers will be available to act as advisers in assisting civil authorities in the preparation of their plans for civil defence. A number of Service officers have been given special instruction at federal civil defence schools.

(11) Support by the Armed Forces and other federal agencies in the event of an attack:

A firm policy has been established under which military forces may be made available to Civil Defence authorities in the event of a serious emergency. The primary task of the Armed Forces is, however, a fighting one and their participation in civil defence would be of a temporary nature and their role a supporting one.

(12) Protection against sabotage on Federal works and support for the provinces and municipalities:

The R.C.M. Police have taken this problem in hand.

(13) Research and development in civil defence matters:

The Defence Research Board and certain divisions of the National Research Council are actively engaged in a number of projects related to such matters as the use of blood substitutes, shock therapy, weapons' effects and radiation detection instruments.

(14) Stockpiling of essential medical supplies and equipment:

Arrangements have been worked out for the stockpiling, at strategic locations, of essential medical stores for hospitals and first aid stations for speedy distribution to target or possible disaster areas in the event of attack.

(15) Public information and education:

Over 1,000,000 copies of various manuals, pamphlets and other literature have been distributed and an information program, using such media as the press, radio, billboards, exhibits and films, is in progress.

(16) Co-operation with the United States and other countries:

Close co-operation has been maintained between Canada, the United States, the United Kingdom and other countries. A number of federal and provincial employees have attended special courses in the United Kingdom and the United States and a number of experts from these countries have visited Canada.

In addition to the above, the federal government has authorized special grants to assist the St. John Ambulance Association in carrying out basic and advanced first aid instruction for accredited civil defence workers.

A number of public-spirited citizens and industries have come forward to volunteer their services or financial support. In this connection, inquiry was made of the income tax authorities, who have advised that contributions made by individuals or corporations to provincial or municipal civil defence authorities come within the definition of charitable donations for which allowance is given under the Income Tax Act.

Training

A variety of civil defence courses are made available to civil defence authorities in the provinces. Provision is also made for certain federal government employees to attend courses. All transportation and living expenses for candidates are provided from federal funds. Each province is allotted a specified number of vacancies and the provincial Civil Defence authorities determine what provincial and local candidates will attend. During the year under review, a total of 1,264 civil defence officials, instructors, nurses, doctors and technicians attended civil defence courses sponsored by the Department. These courses were as follows:

(a) Civil Defence Staff Forums—two-week courses for selected civil defence officials, federal and provincial. To date, two staff forums have been conducted in Ottawa by the staff of the Civil Defence Technical Training School, for 69 candidates.

- (b) Civil Defence (Short) Staff Forums—one-week courses for key civic government officials. A total of four courses have been conducted in Ottawa by the staff of the C.D.T.T.S. for 155 candidates.
- (c) Civil Defence General Instructors Courses—two-and-one-half-week courses for civil defence general instructors. A total of six courses have been conducted at Connaught Rifle Ranges for 168 general instructors.
- (d) Civil Defence Rescue Instructors Courses—two-and-one-half-week courses for civil defence rescue instructors. A total of three courses have been conducted at the federal school at Connaught Rifle Ranges for 55 rescue instructors.
- (e) Civil Defence Radiation Monitor Instructors Course—a two-week course conducted at the Royal Military College, Kingston, by officers and men of No. 1 Radiation Detection Unit, Royal Canadian Engineers (Canadian Army) for Civil Defence. A total of 28 civilian candidates, all with science degrees, have attended this course and qualified as instructors.
- (f) Civil Defence Nursing Instructors Course—A four-day course conducted by a team of instructors from the Civil Defence Health Planning Group. A total of seven courses have been conducted at seven centres across Canada, as a result of which 611 nursing instructors have been trained.
- (g) United States Civil Defence Staff Course—a one-week staff course conducted by the Federal Civil Defense Administration at Olney, Maryland. A total of 16 key civil defence officers have attended a number of these courses.
- (h) Atomic, Biological and Chemical Warfare Defence Courses—three-week courses conducted by the Royal Canadian Army Medical Corps School at Camp Borden, Ontario. A total of 45 civilian candidates have attended these courses.
- (j) Medical Officers ABC Indoctrination Courses—one-week courses conducted by the R.C.A.M.C. school at Camp Borden. A total of 35 civilian doctors have attended these courses.
- (k) United Kingdom Civil Defence Courses—A total of four Canadian candidates attended courses in England during the fiscal year 1951-52.
- (1) Industrial Plant Protection Course—This three-day course was sponsored by the department and was conducted in Montreal. Federal instructors assisted the Director of Civil Defence for Montreal. Approximately 380 key personnel attended this course. (This figure not included in overall total.)
- (m) Civil Service Civil Defence General Instructors—Two courses of one week's duration were conducted by personnel of the Civil Defence Technical Training School for 78 Civil Service Civil Defence instructors at the Hull Armouries.

The following is a breakdown, by provinces, of the numbers trained under the auspices of the Federal Government: British Columbia, 132; Alberta, 139; Saskatchewan, 55; Manitoba, 134; Ontario, 234; Quebec, 308; New Brunswick, 46; Nova Scotia, 80; Prince Edward Island, 10; Newfoundland, 7. Total—1,145.

The remaining number of personnel trained during the fiscal year included federal officials, military, R.C.M. Police and others, making an overall total of 1,264.

Supplies and Equipment

The following is the financial breakdown, by provinces, of the training equipment, including training aids, manuals, badges and certain technical equipment for designated civil defence workers in selected areas, which the federal government has supplied, on a free issue basis: British Columbia, \$45,189.64; Alberta, \$12,415.08; Saskatchewan, \$4,419.30; Manitoba, \$21,282.51;

Ontario, \$89,485.57; Quebec, \$58,862.34; New Brunswick, \$7,104.21; Nova Scotia, \$11,133.33; Prince Edward Island, \$28.75; Newfoundland, \$427.15. Total—\$250,347.88.

Health Planning

The function of the Civil Defence Health Planning Group is to initiate and co-ordinate health services planning at federal level; to act as health advisers to the federal Civil Defence Co-ordinator and to be responsible for developing a general pattern for Civil Defence Health Services for Canada to serve as a guide for health services planning at all levels. The group has formed 12 working parties concerned with first aid arrangements, ambulance services, hospital organization, laboratories, sanitation services, mental health, industrial health, mortuary arrangements, essential medical supplies, special weapons problems, blood derivatives, and so forth.

Lists of supplies and equipment necessary for the training of first aid station personnel were established and procurement action taken for 250 training kits. Substantial headway was made in establishing lists of supplies and equipment to be purchased and stored strategically for the operational use of first aid stations in the event of disaster. Arrangements are approaching completion for the purchase and storage of the equipment in collaboration with the Department of National Defence and similar arrangements are close to completion in respect of the essential medical supplies and equipment which would be required for the operation of hospitals, laboratories and other essential health services.

The following material has been prepared: "Civil Defence Health Services Manual"; "Basic First Aid"; "Civil Defence First Aid Supplement"; Hospital Services and Casualty Medical Records; Hospital Planning Survey Kit.

A definite plan of action has been developed and includes the establishment, at local level, of some 226 large mobile first aid stations and the supply of the necessary training equipment to the units; the completion of health services organization at provincial and local levels and the survey and planning, on a uniform basis across the country, of all hospitals located in areas which might come under attack or in areas which would likely be required to support target areas.

Welfare Planning

With the transfer of Civil Defence from the Department of National Defence to this department, immediate action was taken to:

- (a) establish a Civil Defence Welfare Section and appoint an experienced and qualified Civil Defence Welfare Administrative Officer;
- (b) establish a Welfare Advisory Committee composed of officials from the welfare field.

A careful study of Civil Defence Welfare Services in Great Britain and the United States was undertaken and visits were made to the two countries in an effort to obtain as much material as possible. The Welfare Administrative Officer, in consultation with various working parties, composed of specialists in the particular fields under consideration, prepared and distributed three pamphlets entitled "Welfare Services in Canada's Civil Defence Program"; "Emergency Feeding"; and "Organization of Welfare Centres and Emergency Lodging". In addition, the following aspects of the Welfare Services were considered and material prepared in draft form: "Emergency Clothing"; "Evacuation and Reception"; "Registration and Information"; "The Care of the Individual"; "Welfare Services in Mutual Aid Areas".

A limited number of liaison visits were made to the provinces. However, in view of a recently authorized increase in establishment, it will be possible for the Welfare Officer to keep in closer touch with provincial and municipal authorities and, also, to provide a greater amount of assistance in the form of informational material.

Warning and Communications

Negotiations were completed with telephone companies for the provision and installation of private and toll lines and equipment comprising a National Civil Defence Warning System. The system will enable dissemination of warnings from military locations (Air Defence Control Centres) to Civil Defence key points in target areas. Liaison with United States civil defence authorities was undertaken with respect to appropriate co-ordination of warning information. Operating procedures were developed and published.

Technical investigations and tests were also conducted and specifications developed for the manufacture, in Canada, of sirens similar to those used in Great Britain during the last war. The siren specified is a distinctive undulating two-tone type with local and remote control facilities. Sirens and control equipment have been distributed to target areas.

Communications equipment has been obtained in conjunction with plans for the development of suitable procedures that would serve as a guide for the operation of existing services. In this connection, studies are continuing with respect to wire line and radio communication arrangements and systems, including integration of amateur radio services and the broadcasting industry to the best extent possible.

A considerable amount of material for the guidance of civil defence authorities with regard to warning and communications has been developed, published and distributed. Tests were also conducted at several exercises and lectures given at the federal Civil Defence Technical Training School.

The Department of Transport has under consideration matters relating to the control of electro-magnetic radiations, as they concern the broadcast industries and other services. This study is being co-ordinated with the United States authorities so that a uniform plan may be evolved for the North American Continent. The military requirements must be considered in this plan and, in order to prevent any enemy from receiving navigation assistance, present thinking contemplates strict control of radio broadcast stations. The Canadian/United States plan is now under formation and it is expected that it will be integrated by June 1, 1952.

Transportation

The Federal Civil Defence Transportation Committee was formed on April 9, 1951, under the chairmanship of a member of the staff of the Board of Transport Commissioners, and with membership consisting of representatives of the major transportation agencies. Activities of this committee to date have consisted, mainly, of a study of the overall transportation problems which may arise in the event of a disaster, such as the transportation of supplies, material and personnel to back up the resources of the provinces and municipalties concerned.

As recommended by the committee, it is anticipated that a Director of Transport will soon be appointed at federal Civil Defence Headquarters.

In order to encourage enrolment of motor vehicles for civil defence, approximately 45,000 vehicle registration stickers have been issued to the provinces to be placed on privately-owned or commercial vehicles after they have been registered for use in a national emergency.

Animal Health Emergency Organization

The federal Department of Agriculture has established an Animal Health Emergency Organization, with a committee in each province, which will deal with indications of sabotage or direct biological attack in this field during an emergency and thereby assist in the prevention of large-scale epidemics. Some provincial civil defence authorities have already established Health of Animals Committees and it has been suggested that these committees be merged with the new official body in order that there will not be overlapping in any province.

Information Services

Every effort was made to ensure that all provinces were advised of new ideas and new developments in the civil defence field, and close liaison was maintained in the distribution of information material. This service is represented on the Joint United States/Canada Civil Defence Committee and much useful information has been exchanged between the two countries.

Federal activities in this field included:

- (a) Manuals and Publications—Approximately 850,000 copies of the following informational material, prepared by the officials concerned with the various subjects, have been distributed: "The Effects of Atomic Bomb Explosion on Structures and Personnel"; "The Training Plan"; "Personal Protection Under Atomic Attack"; "Basic First Aid"; "Technical Guidance on the Provision of Air Raid Shelter"; "First Aid and Home Nursing Supplement"; "Hospital Services and Casualty Records"; "Industrial Plant Protection"; "Civil Defence Health Services"; "Welfare Services in Canada's Civil Defence Program"; "Emergency Feeding"; "A Glossary of Civil Defence Terms"; "Nursing Aspects of ABC Warfare"; "The Warden Service"; "Operations and Control of the Civil Defence Services"; "Water Supplies for Wartime Fire Fighting".
- (b) Press—Information on new developments has been issued nationally through the Canadian Press, the British United Press and other press services. Items of more local interest have been summarized for the local press. In addition, a number of press conferences have been arranged.
- (c) Radio—A Civil Defence presentation entitled "Bombed Out" has been completed and released to 105 private stations across Canada. In addition, a number of short civil defence broadcasts have been prepared and carried over the C.B.C. network and other local stations.
- (d) Films—The following films and film-strips have been procured and supplied to the provinces on a scale determined by the Training Section of the Civil Defence Division: A new Fire Bomb; An Introduction to Radiation Detection Instruments; Atomic Energy; Bikini the Atom Island; Chemistry of Fire; Disaster Control; Fire Fighting for Householders; Fire's the Enemy; First Aid on the Spot; London Fire Raids; Medical Effects of the Atomic Bomb; The Waking Point; Methods of Rescue; Forms of Collapse; Basic Fire Fighting; The Problem of Civil Defence; Basic Chemical Warfare; Rescue; High Explosives, Bombs, etc.; Fire Fighting; Chemical Warfare; Bomb Damage to Unframed Buildings; Effects of Bomb on Buildings; Voids Created by Blast; Bomb Damage to Framed Buildings; Dangerous Structure; Rescue Training Site; Effects of Allied Bombing Attack; Bomb Damage.
- (e) Billboards—Space on ninety-six billboards in Montreal was offered, free of charge, by a Montreal advertising firm for civil defence purposes. The message used in this case was "Prepare Now—Just In Case".
- (f) Exhibits—A full-scale civil defence exhibit, 38' x 10', was designed and constructed for use at exhibitions in various parts of Canada. Space was obtained

In the Canadian National Sportsmen's Show, Toronto, March 14 to 22, and the exhibit was first shown at this point. In addition, smaller panel displays, which can be utilized in areas of different sizes, have been designed.

(g) Signs—A set of signs for both indoor and outdoor use has been obtained from the Federal Civil Defense Administration of the U.S.A. so that some uniform policy on signs for Canada may be developed. These signs are being studied, along with alternative designs.

Co-operation with the United States

Meetings have been held between Governor Millard Caldwell, director of Civil Defense in the United States, and the Minister. A Joint U.S./Canada Civil Defence Committee has been formed and Working Groups set up under the following headings:

- No. 1—Medical, Health, Special Weapons Defence and Emergency Welfare Services.
- No. 2-Training and Exchange of Personnel.
- No. 3-State/Province Agreements.
- No. 4-Immigration Matters.
- No. 5-Customs Matters.
- No. 6—Sampling and General Epidemic Control Matters. (Combined with Working Group No. 1.)
- No. 7-Public Affairs.
- No. 8-Attack Warning and Communications.
- No. 9-Standardization and Interchange of Equipment.
- No. 10-Standardization of Organization Forms and Procedures.
- No. 11—Reimbursement for Cost of Civil Defence Aid Rendered.

The second meeting of this Joint Committee, held in Ottawa on August 7, 1951, gave concrete effect to the agreement between the two countries, which was approved by an exchange of notes between the two countries on March 27, 1951, and which provided that:

- (a) the federal civil defence authorities of the two countries will keep one another informed on all matters relating to civil defence;
- (b) they will co-operate in matters relating to legislation and regulations, material, equipment, supplies and facilities, training schools, pamphlets and methods;
- (c) they will exchange personnel at the working level and make available to each other the training facilities of their respective countries;
- (d) they will clear away all restrictions which would hinder the free passage of materials and personnel required for civil defence purposes across their international boundary;
- (e) they will work out arrangements for the closest possible co-operation between state and provincial civil defence organizations and between local civil defence authorities on opposite sides of the border.

It was further agreed at this meeting that the approved channel of communication between the two countries on matters pertaining to civil defence would be through the Defence Research Liaison Office of the Canadian Joint Staff in Washington, D.C.

As far as possible, civil defence activities in the United States and Canada will be co-ordinated for the protection of persons and property from the result of enemy attack as if there were no border.

Co-operation with the United Kingdom

As with the United States, the very closest relationships have been worked out with the civil defence authorities in the United Kingdom. The federal Co-ordinator and certain senior members of his staff, as well as a number of key provincial officials, have attended special courses in Britain.

Canada has been represented on a number of conferences of international significance, such as the U.K./U.S./Canada Combined Conference on Food Aspects of Civil Defence. The Co-ordinator has visited and inspected civil defence installations in the United Kingdom and certain continental countries and Canada, in turn, has played host to a number of civil defence officials from overseas.

ADMINISTRATION BRANCH

INTRODUCTION

The Administration Branch of the Department consists of the following Divisions: Departmental Secretary's, Information Services, Legal, Library, Personnel, Purchasing and Supply, and Research.

Because these Divisions serve the entire Department, both in Ottawa and in the field, new and increased activities elsewhere in the Department resulted in a greater volume of work for all Divisions of the Administration Branch.

The expansion of the Old Age Security Program, the transfer to the Department of federal civil defence responsibilities, continuing development of the National Health Grants Program, and a general acceleration of many of the Department's other activities were reflected during the past year in increased work for the Administration Branch.

DEPARTMENTAL SECRETARY'S DIVISION

The Departmental Secretary's Division comprises the Accounts and Estimates Section, Central Registry Services, Correspondence Section, Duplicating Section, Stenographic and Typing Pool, and Parliamentary Papers Section. The usual responsibilities of the Division in respect of the entire Department continued to be carried out during the year.

In addition, new and expanded activities throughout the Department were reflected in a large increase in all aspects of the work of the Division. The impact of Civil Defence was felt particularly in the Duplicating and Accounts and Estimates Sections, where the volume of work was much greater than in previous years. In the latter Section many changes in the manner of preparing Departmental Estimates created a large increase in that phase of the work.

New sub-registries were established by Central Registry Services in the Civil Defence Division and in the Quarantine, Immigration Medical and Sick Mariners Division. Additional up-to-date mechanical equipment in the Duplicating Section and in the Stenographic and Typing Pool made it possible for these Sections to handle a substantially greater volume of work without the necessity for additional staff.

INFORMATION SERVICES DIVISION

Civil Defence

Apart from its other continuing responsibilities, the new need for informing the public concerning Civil Defence, and for outlining federal objectives and measures to support provincial and local authorities in this field, made exceptional demands upon the Information Services Division. While continuing its

health and welfare educational and informational program, the Division employed all media to explain the purpose of, and to enlist co-operation with, services required to minimize casualties and damage in disaster and to equip the civil population for its role under possible enemy attack.

Within a few months of transfer of the Civil Defence Division to the Department, several illustrated manuals had been produced for distribution through provincial civil defence channels as well as by national organizations concerned for the country's safety. Widespread publicity was obtained through press and radio, and the Division prepared exhibits, posters, books, leaflets and other material designed to present the problem clearly and emphasize the necessity for organization to deal with disaster in either peace or war.

Care was taken not to create undue public apprehension but rather to correct popular misconceptions concerning the lethal power of new weapons and to make it clear that there were ways of mitigating their effects. Bearing in mind the importance of a continuous program of preparedness under international tension, the Division embarked on a long-term informational program rather than an intensive campaign. Canadians were told what might be required of them, how they could prepare for emergency and what they should do in the event of disaster. Promotional work related to recruiting, training, first aid courses, community organization, etc., was left to municipal authorities, but the Division advised on employment of informational media in all such drives.

Liaison was established with provincial civil defence information officers, where they had been appointed, and with provincial Civil Defence Co-ordinators generally, in the distribution of informational material. The Division provided an information representative for the joint United States-Canada Civil Defence Committee. There was a useful exchange of material between the Division and the public affairs office of the Federal Civil Defense Administration of the United States as well as with individual State officials. Visits were paid to several States to relate civil defence informational activities, as required under the international mutual aid agreement.

Co-operation with Press and Radio

Press co-operation continued to make the work of the department known to the public. Picture stories were published dealing with scientific work in the Laboratory of Hygiene and in the Industrial Health Laboratory, and the press was assisted in reporting inspection and preventive work of the Indian Health Services, the Food and Drug Divisions and the Narcotic Control Division. The National Sickness Survey was widely publicized.

Press conferences were arranged and articles were prepared on request for individual publications, including several house organs and trade papers. Press fillers and a weekly column on various aspects of health and welfare were issued monthly and used extensively by weekly papers, while cartoons and verse were featured in 89 English and 26 French publications. Magazine articles were written for a number of periodicals and informational material was prepared relating to Mental Health Week. Information officers attended meetings of editors of both English and French language weeklies.

News releases and liaison with newswriters resulted in the publication of information concerning: civil defence staff forums, the Technical Training School, construction of air raid shelters, meetings of the joint United States-Canada Civil Defence Committee, civil defence exercises in several Canadian cities, civil defence manuals, courses at Royal Military College and Camp Borden and organization of civil defence in the federal civil service, etc. At

least two large daily newspapers published the full text of the manual "Personal Protection under Atomic Attack", one of them using the original illustrations, by arrangement with the Division.

Radio stations everywhere carried frequent reports on departmental activities. National hook-up coverage was obtained on several occasions, on both English and French networks, dealing with old age security, immigration medical inspection, civil defence and narcotic control. Full-length radio reports were carried on the C.B.C.'s "News-Roundup", "International Service" and "Les Actualités".

Two private stations in Ottawa and one in Hull, Que., did on-the-spot broadcasting of several events, including presentation by the Minister of the first Old Age Security cheques.

For the thirteenth consecutive year, many private stations broadcast daily health notes prepared by the Division, making further free contributions to health education in Canada. The Division's original 10-minute dramatizations entitled "Here's Health" continued to be popular with broadcasters, 104 independent radio stations using them as regular features thus providing, free of charge, an important public service. Development of television in Canada was watched closely and consideration was given to this new medium as a method of directing health and welfare information into the home circle.

Publications

Periodicals issued by the Division included "Canada's Health and Welfare" monthly magazine, which this year contained special two-color supplements on "Old Age Security" and "Civil Defence". Also produced were monthly issues of the "Industrial Health Bulletin" and "Canadian Nutrition Notes" as well as an issue of the "Industrial Health Review". The Division served as editorial consultant in the publication of the "Food and Drug News" and this year initiated and edited monthly issues of a "Civil Defence Bulletin".

The policy of producing and distributing health and welfare publications continued and the volume of such material increased. Not including the department's periodicals, distributed regularly to established request lists, the Division distributed approximately 5,600,000 pieces of printed material during the year, of which 4,500,000 were in English and 1,100,000 in French.

Many existing publications were revised and updated. New printing included: a leaflet on "Allergy", the French edition of "Guide to the Diagnosis of Occupational Diseases", "Table of Food Values", the French edition of "Nutrition Cards for Nurses", "Good Habits for Good Teeth", a child training folder on "Baby Talk", "Hockey Coaching", "Let's Co-operate for the Good of Sport", "Posture's Important for Teen'agers", "Play for Pre-Schoolers", the French edition of "Simplified Staging" and "The Chemical Estimation of the Potency of Antibiotics".

Complete revision was initiated of the standard textbook "The Canadian Mother and Child" and of the three Blindness Control publications to be combined under the title "Eye Care". Bilingual cheque inserts were produced for the Family Allowances Division. Extensive rewriting was done on a number of Physical Fitness publications and production of the kits "Film Discussion Guides" and "Study Groups Made Easy" was followed up by liaison with such organizations as Home and School concerning their use. Text and art were completed for a folder entitled "Preparing Your Child for Hospital" and badges and insignia were designed for the Physical Fitness Division in connection with the Canadian Aquatic Standards.

Numerous manuals were printed for public information concerning civil defence and for the training of volunteers in the national preparedness program.

These books included: "Effects of the Explosion of an Atomic Bomb on Structures and Personnel", "The Training Plan", "Personal Protection under Atomic Attack", "Basic First Aid", "Technical Guidance on the Provision of Air Raid Shelter", and manuals prepared by the civil defence health and welfare planning groups.

In co-operation with an industrial plant protection committee of metropolitan Montreal, production was begun of a colorful book entitled "Attack". The Division prepared a simple leaflet dealing with civil defence, for distribution at displays, and issued an eight-page pictorial supplement to the departmental magazine, "Canada's Health and Welfare" outlining the purpose and scope of civil defence. This supplement, presenting a simple but effective picture, was in great demand in all provinces.

Supplementing provincial channels, the Division took advantage of the interest and co-operation of a number of national organizations in the distribution of its informational material. For instance, through the kindness of the Royal Canadian Institute of Architects and of the Canadian Construction Association, copies of the manual "Technical Guidance on the Provision of Air Raid Shelter" were mailed to all members of those organizations.

Several printing projects were undertaken for the new Civil Defence division, including identification and enrolment cards for civil defence workers and certificates for graduates of the federal Civil Defence Technical Training School.

Exhibits and Displays

Exhibits were widely employed. The Department was awarded a special citation by winning first place with its display, for the second consecutive year, at the annual meeting of the American Public Health Association, held this year at San Francisco, California.

A 24-foot dental health display was exhibited at meetings of the Western Canada Dental Association, Winnipeg, the Maritime Dental Association, Charlottetown, and the Canadian Dental Association, Ottawa. Other exhibits were sent, with information officers, to numerous conferences and exhibitions including: the Central Canada Exhibition, Ottawa; Canadian Welfare Council and Ontario Community Work Council meetings in Toronto; Western Regional Conference on Social Work, Atlantic City, N.J., and L'Association des Éducateurs de Langue Française, at Memramcook, N.B.

An extensive display featuring a domestic air-raid shelter as it could be constructed in any basement was made for use at exhibitions and was erected first at the Canadian National Sportsmen's Show in Toronto, in March. Smaller displays were made for use by the Food and Drug Divisions in publicizing inspection and control activities, and a series of portable panel displays, to explain the importance of civil defence preparations, and for use at conventions and meetings, was designed for the Division by the Canadian Government Exhibition Commission.

Posters

Posters were prepared for display in Post Offices and other public buildings to inform senior Canadians of new Old Age Security regulations. The Division arranged for the production of prototypes of signs to be used in connection with civil preparedness. Advantage was taken of an offer from a national outdoor advertising firm to utilize free billboard space, with a civil defence theme, throughout Metropolitan Montreal. Many of these boards were illuminated for night display.

Work was done on a poster on Vegetables and another on Canada's Food Rules, for the Nutrition Division, and two posters on child health were produced for the Indian Health Services.

Films and Filmstrips

Screen facilities were used extensively both for informational and training purposes. The Division acted as liaison in the previewing, procurement and distribution of films and filmstrips on health and welfare subjects.

The Department was co-sponsor of the film "Hold Back the Night", produced in the interest of Blindness Control. Two departmental screen productions, "Challenge—Science against Cancer" and "The Terrible Twos and the Trusting Threes", received awards at competitions sponsored by film exhibitors, and National Health and Welfare films and filmstrips were widely used, both in Canada and abroad.

Second portion of the film "The Frustrating Fours and the Fascinating Fives" was completed and discussions were held concerning a proposed film on "Psychological Aspects of Disaster". Research and scripting were done for a film on the mental aspects of care of the aged and a start was made on a film on "Rehabilitation of the Mental Patient". Also initiated was a film for the Nutrition Division on "What Should Tommy Eat?" Work was begun on a film and filmstrip on "Weaving" for the Physical Fitness Division.

Filmstrip production continued, with completion of "The Starlight Story" for Indian Health Services, "Teen-Age Teeth", for the Dental Health Division, "Once in Wally's Lifetime", and "What You Should Know about Cancer". Editorial work was provided for the commentary of "Hallucinations", the French version of the film "Breakdown", on the commentary for the French version of "The Terrible Twos and the Trusting Threes", and on the French edition of the Cancer filmstrip.

An Advisory service was provided for all divisions on the visual presentation of informational and educational materials. Films were previewed and purchased for the four departmental film libraries, as well as for civil defence use.

Biological Photography

Photo services were again provided to all divisions. The Division's Biological Photographic Laboratory, in addition to its regular work, undertook two major projects in connection with the Industrial Health Division's film radiation monitoring service, (a) completion of the design of processing equipment and establishment of sensitometric standards and (b) design and development of a machine to provide positive identification to films used in film radiation monitoring.

Bilingual Services

The Division ensured that its informational material in all media was appropriate and significant to both English and French-speaking Canadians in all areas. In addition to translation and adaptation, this called for research and liaison, particularly on the part of the information officer in charge of French information services.

Miscellaneous Activities

Inserts dealing with school attendance were prepared for distribution with Family Allowance cheques. Information work of the Department was explained to groups of graduate nurses attending special university courses, to field officers of the Indian Health Services, to Family Allowances regional directors and to government administrative officers-in-training.

Quantities of the folder "Health Care in Canada", produced previously, were sent overseas for distribution to immigrants through the Immigration Medical Service. At the annual meeting in Montreal of the Canadian Public Health Association, federal and provincial health educators met to discuss mutual problems and the Division's information officers took advantage of every opportunity to visit individual newspapers, radio stations and provincial offices in order to promote health and welfare information.

Conferences were held with the Queen's Printer's officer in charge of sales and distribution, and plans were made for bringing health, welfare and civil defence material before the public through bookstore sales. The Division arranged printing of the departmental Annual Report.

In addition to the customary health and welfare messages carried on outgoing mail, cancellation stamps with a civil defence slogan were provided for use on departmental correspondence, including the millions of envelopes carrying Family Allowances and Old Age Security cheques. On two occasions during the year, intensive advertising campaigns, using press and radio, were employed to promote the early filing of applications under the new Old Age Security regulations. These efforts, which were supplemented by posters, articles and mail material, proved most effective.

Assistance was given to field staffs of the Department, arrangements being made for informational material to be used even in remote areas where field officers of the Indian Health Services were on duty. The Division was represented at meetings of numerous organizations, including a joint planning committee established to study the utilization of informational material, and it assisted in assembling bibliographies and catalogues of literature relating to its fields.

LEGAL DIVISION

The volume of legal and administrative services rendered by the Legal Division was considerably increased during the year due to the expanded Old Age Security Program, involving three new Statutes and Regulations, and because of the transfer to the Department of responsibility for Civil Defence.

In addition, the Legal Division continued to provide legal and administrative services to all Divisions of the Department in matters pertaining to the preparation of contracts and agreements, the giving of opinions, and advising and assisting in prosecutions under the various Acts, such as the Food and Drugs Act, the Family Allowances Act and the Opium and Narcotic Drug Act.

DEPARTMENTAL LIBRARY

The Departmental Library is concerned with the selection, acquisition and organization of reference and technical books, serial publications, pamphlets and government documents pertaining to all phases of the Department's work. While the collection is intended primarily for the use of the departmental staff, it is increasingly drawn upon by other libraries.

All orders for publications required for regional establishments as well as for those in Ottawa, are processed and recorded in the Main Library. Thus needless duplication is eliminated and it is possible to arrange for quantity orders.

Work continued during the past year on an author-subject-title card catalogue of all reference publications owned by the Department, regardless of location. Additional sets of cards were supplied for unit catalogues in the three Ottawa branches of the Departmental Library, two special collections and two regional libraries; further sizeable collections in other regional establishments will be worked in gradually.

Records of serial publications were transferred to the Union Catalogue maintained by the Canadian Bibliographic Centre (National Library) as well as the records of all additions to the Main Catalogue during the year.

An annotated bibliography was begun on Social Welfare in Canada, halfyearly cumulations of which will be published in the United Nations Social Welfare Information Series.

PERSONNEL DIVISION

The Personnel Division conducts the personnel business of the Department with the Civil Service Commission, the Treasury Board staff, the Comptroller of the Treasury and other government agencies. This Division is responsible for advising on changes of organization within the Department, for representing the Department in negotiations about the appointment of staff, and for doing the work required within the Department in connection with promotions, transfers, pay, superannuation, leave, attendance and personnel records.

On March 31, 1952, there were 3,221 employees in the Department, of whom 981 were permanent and 2,240 temporary, an increase of 93 permanent and 183 temporary civil servants during the year. This increase was mainly due to the introduction of the Old Age Security Program and to the transfer to the Department of responsibility for Civil Defence. There were also small increases in the staff of the Indian Health Service and of the Immigration Medical Service overseas.

The relatively small number of permanent civil servants can be attributed to the newness of the department, to the addition of two new Divisions during the year, to the relatively large number of married women employed and to the number of positions normally filled by Indians, who rarely remain at work long enough to become eligible for permanency. Every effort is being made to increase the number of permanent employees.

The turnover of staff for the year amounted to 896, or approximately 28 per cent. Of this total 509 were in the Indian Health Service, which was 45 per cent of that service, and 387 were elsewhere in the Department, or 19 per cent of the remaining staff. The figure of 19 per cent compares very favourably with the rest of the government service. Much of the turnover in the Indian Health Service is due to the fact that the policy is to employ as many Indians as possible: normally there are about 250 on strength.

Only 812 of the staff of the Department were employed at Ottawa. Of these, 411 were in the Health Branch (other than Indian Health Services),

270 in the Administration Branch and 40 in the Welfare Branch, 73 in the Civil Defence Division and 18 in the Indian Health Service. The remainder of the staff were located in other parts of Canada and overseas, as follows:

	Velfare Branch	Health Branch other than Indian Health Service	Indian Health Service	Total
Northwest Territories		_	21	21
British Columbia	57	62	382	501
Alberta	53	5	283	341
Saskatchewan	52	2	74	128
Manitoba	51	16	74	141
Ontario (excluding Ottawa)	215	26	240	481
Quebec	217	177	28	422
New Brunswick	49	24	5	78
Prince Edward Island	9	1	1	11
Nova Scotia	49	66	12	127
Newfoundland	34	8	-	42
Overseas	_	116	_	116

Much effort was spent on the reorganization of two of the larger services—the Indian Health Services and the Food and Drug Divisions. An analysis was made of the present responsibilities of these Directorates and changes were planned that would enable them to meet their responsibilities more efficiently. At the same time economy in the use of staff has been a governing factor in recommending any organizational changes.

While there is still a shortage of some categories of professional or scientific specialists required by the Department, this situation improved during the year. This problem was partially solved by arranging for postgraduate study for certain carefully-selected employees of the Department.

PURCHASING AND SUPPLY DIVISION

The past year proved to be an exceptionally busy one for the Purchasing and Supply Division. Requisitions received totalled 11,200, as compared to 6,635 in the preceding year. This amounted to a 67 per cent increase in volume of work without any increase in staff. The increase is a reflection of general increase in departmental duties.

Upon the transfer of responsibility for Civil Defence to this Department, large quantities of equipment and supplies immediately required were of a type not normally purchased, such as sirens, steel helmets, stirrup pumps, coveralls, blankets, rubber boots, stretchers, incendiary bombs and first-aid equipment. Most items were used for training at the federal Civil Defence Technical Training School in Ottawa, and distribution in quantity was made for training purposes throughout the Provinces. While unfamiliar with these commodities the Division was successful in securing them promptly and at advantageous prices. The Inspection Board of the Department of National Defence rendered valuable assistance in the way of advice and inspection.

Purchases of some items also required for the Armed Forces were routed through the Department of Defence Production for co-ordination of production and production schedules.

Demands of the Indian Health Services Directorate were also increased and included equipment for the new hospitals at Hobbema, Alberta, and Fort Qu'Appelle, Saskatchewan. Five new nursing stations were fully equipped. In

some cases isolation made the problem of efficient supply at the required time a matter of concern to the Division. For instance, the procurement and supply of coal for Moose Factory Indian Hospital, situated on Moose Island, James Bay, again presented great difficulties.

The annual problem of supply to Indian Health Service stations in the East Arctic again arose. Equipment and stores were purchased for shipment to the Eastern Arctic by the "C. D. Howe", "Rupertsland", "N. B. McLean" and the "Regina Polaris", sailing from the ports of Montreal, Quebec and Churchill. Scheduled dates for tractor-train supply were successfully met in central northern areas. Summer shipments from Waterways to the Northwest Territories, Lower Mackenzie and the Western Arctic were also held to schedule.

During the year members of the Division represented the Department on panels convened by the Canadian Government Specifications Board on the development of standards and specifications. As a result, a new standard was established for clinical thermometers and a new plastic tableware was developed for use in federal government institutions.

The Transport Section of the Division purchased 21 new vehicles, including passenger cars, trucks, tractors, a bulldozer, and a prototype rescue vehicle for Civil Defence. Purchase of tires directly from manufacturers was instituted, with normal delivery anywhere in Canada in approximately 72 hours, thereby ensuring efficient and economical supply. Operators' permits and identification cards were issued to all personnel driving departmental vehicles.

The Laboratories of the Health Branch presented increased demands, due to expansion of activities and staff, for laboratory equipment, glassware, chemical and general supplies. Numerous items of advanced scientific equipment were also procured.

Normal items of supply were made available to establishments of the Division of Quarantine, Immigration Medical and Sick Mariners Services in Continental Europe, Gander, Halifax, Quebec, Dorval, Montreal, Vancouver and William Head. Modern X-ray equipment was also provided for the Immigration Medical Services at London, Liverpool, Glasgow and Paris.

Addition of responsibility for administering Old Age Security payments brought increased demands for printing, office equipment, stationery, etc., from the Family Allowances Division.

Liaison for supply purposes was necessary with numerous other federal departments as well as with the British Ministry of Supply.

RESEARCH DIVISION

The Research Division continued to be responsible for the collection and analysis of health and welfare material. Major projects underway during the year included the preparation for a draft of the National Health Survey Report, the conduct of a Survey of Welfare Positions in Canada, studies in medical and hospital care in Canada and abroad, and a number of specific studies at the request of other Divisions and private organizations. The Division provided research assistance to the Defence Medical and Dental Services Advisory Board, the National Advisory Committee on Manpower, the National Advisory Committee on the Rehabilitation of Disabled Persons, and the Interdepartmental Committee on Health Insurance.

Close working relations were continued with provincial health and welfare departments, the schools of public health and social work, the Canadian Welfare Council and the national voluntary agencies in both health and welfare fields. Liaison was maintained and information exchanged with leading agencies engaged in social welfare work. The responsibilities of the Division were continued for the preparation of reports on different aspects of health and welfare services in Canada for the United Nations and its specialized agencies, notably the Economic and Social Council and the World Health and International Labour Organizations. The Director of the Research Division was an advisor on Social Security to the delegation representing the Canadian Government at the 34th Conference of the International Labour Organization in Geneva.

Social Work Survey

Work progressed on the Survey of Welfare Positions which was begun in 1951, at the request of the National Conference on Personnel in Social Work, to determine the demand for social workers in Canada. The planning and organizational phases of the study were carried on in co-operation with an Advisory Committee set up by the Canadian Welfare Council and also with the support of voluntary agencies and federal and provincial Departments. The survey, planned as a guide to social agencies and schools of social work in planning staff requirements and training, covers all full-time paid employees in welfare positions as well as vacancies and new positions to be set up, and indicates preferences for qualified social work staff. It is designed to show size, composition and area of work of existing welfare staffs and the distribution and use of qualified social workers. Background reference papers and questionnaires were distributed on the basis of lists prepared by local Survey Representatives. The analysis of the returns and preparation of the report will be completed during the coming fiscal year.

At the request of the Canadian Nurses Association, a study of Head Nurse Functions and Activities was undertaken. The Register of Physicians was maintained, and its records partly transferred to a punch card system. The Division worked with the Epidemiology Division, the Directorate of Health Insurance Studies, the Dominion Bureau of Statistics and Provincial Health Departments in conducting the Canadian Sickness Survey, and assisted the Dental Health Division with its studies on Dental Fluoridation, and the Civil Defence Health Planning Group with various aspects of defence manpower planning and health statistics. The Division participated with the Epidemiology Division in preliminary planning of the morbidity aspects of the International Joint Commission's air pollution study in the Detroit-Windsor area.

In connection with rehabilitation, the Division has been steadily building up its records of services in Canada and reference material on rehabilitation programs in other countries. Research studies have been carried out in connection with the development of departmental programs and also for the assistance of the National Advisory Committee on the Rehabilitation of Disabled Persons. The Director of the Division was appointed one of the three federal representatives on the Advisory Committee.

Health Studies

A number of provincial health survey reports were received and the Research Division began compiling a national health survey report containing comprehensive data on health personnel, services and facilities. In collaboration with the Mental Health Division, a Survey of Psychiatric Services in General Hospitals was undertaken and tabulation of the returns was begun. Assistance was given to the Directorate of Indian Health Services in establishing a system of reporting health and morbidity data. Morbidity and patient movement data

are now being recorded and tabulated from all departmental and non-departmental hospitals serving the Indian and Eskimo populations as well as other health units, including nursing stations and health centres. A list of clinics in Canada was compiled for the Dominion Bureau of Statistics and a summary review of provincial legislation dealing with food standards was prepared for the Legal Division of the Department.

A number of comprehensive bulletins on health insurance programs in other countries were prepared during the year. Using material collected by the Director of Health Insurance Studies, the Division published "Health Insurance in Sweden", and revised an earlier version of "Health Insurance in Denmark". Draft bulletins on Health Insurance in Norway, the Netherlands and in Great Britain 1911-48, were also prepared. The Division continued to assist the Directorate of Health Insurance Studies in carrying out specific projects such as the development of national and per capita cost estimates for different services, the analysis of programs of government and voluntary health and hospital prepayment plans and the preparation of forecasts of future supply of and demand for health personnel in Canada.

International Studies

A study was also undertaken of international comparisons of expenditures on health, welfare and social security in countries whose social and economic institutions were similar to those of Canada, expressing these comparisons by per capita amounts and as percentages of national income.

During the year, the Division continued to render service to the United Nations' Department of Social Affairs, particularly in connection with studies on children deprived of normal home life and standards of institutional care for children, the survey of legislative and administrative regulations providing economic advantages in favour of the family, and the periodic report on the suppression of traffic in persons and related problems. Work was begun on the use of community welfare centres and on the biennial report on family, community and child welfare. The Division also furnished the United Nations with semi-annual bibliographies on social welfare legislation, and prepared a report on "Health Protection in Local Areas in Canada", for the World Health Organization.

Additional bulletins were produced, including summaries of some of the provincial Health Survey Reports. A monthly article on different aspects of social welfare outside Canada continued to be supplied to "Canada's Health and Welfare". The Division prepared sections of the Canada Year Book and other publications dealing with health and welfare in Canada.

INDEX TO TABLES

CIVIL SERVICE HEALTH

		PAGE
Table 1 Table 2 Table 3 Table 4	Health Unit Statistics for the Five-Year period ending March 31, 1952 Health Unit Statistics, by Months, for the Fiscal Year 1951-52 Health Centre Statistics, Fiscal Year 1951-52 Activities of the Consultant Psychologist, Fiscal Year 1951-52	123 124 125 126
Table 5	Retirements from Service, according to Disability, Fiscal Year 1951-52	126
	FOOD AND DRUGS	
Table 6 Table 7 Table 8	Drugs Examined, from April 1, 1951 to March 31, 1952	127 128 129
	NARCOTIC DRUG CONTROL	
Table 9	Convictions under the Opium and Narcotic Drug Act, Judicial Year ended Sept. 30, 1951.	130
Table 10	Estimated Consumption of the Main Narcotics, for the period 1942-51 inclusive.	131
Table 11	Imports of the Main Narcotics, 1942-51 inclusive	132
Q	UARANTINE, IMMIGRATION MEDICAL AND SICK MARINERS SERVICES	
Table 12 Table 13 Table 14 Table 15	Summary of Immigration Medical Service activities, Fiscal Year 1951-52 Certifications under Sec. 3., Immigration Act, 1951-52 Ships boarded by Quarantine Officers, Fiscal Year 1951-52 Total number of Vessels, Sick Mariners' Dues Collected and Expenditures, Calendar Year 1951	133 135 136 137
Table 16	Vessels inspected for Deratization, 1951-52	138
	FAMILY ALLOWANCES	
Table 17 Table 18 Table 19	Number of Employees, as at March 31, 1951, and at March 31, 1952 Family Allowances Payments, Fiscal Year 1951-52 Families receiving Family Allowances, Fiscal Year 1951-52	139 140 141
Table 20 Table 21 Table 22	Children receiving Family Allowances, Fiscal Year 1951-52	142 143
Table 23	of March 1951 and March 1952	144
Table 24	Average Allowance per Family and per Child, March 1952	145
Table 25	Overpayments of Family Allowances remaining Unpaid, March 1952	146
Table 26	Overpayments of Family Allowances remaining Unpaid, March 1952 compared to March 1951	147
Table 27	Breakdown of Overpayments discovered in the Fiscal Year ended March 31, 1952	148
Table 28 Table 29	Birth Verification	150
Table 30	51 and 1951-52. Transfer of Family Allowances Accounts between Provinces, Fiscal Year 1951-52.	151 152

	OLD AGE SECURITY	PAGE
Table 31	Statistics on Old Age Security	153
	OLD AGE PENSIONS	
Table 32	Federal Payments of Old Age Pensions, under the Old Age Pensions Act, by Provinces, for Fiscal Year 1951-52	154
Table 33	Federal Payments in respect of Blindness, under the Old Age Pensions Act, by Provinces, for the Fiscal Year 1951-52	154
Table 34	Number of Old Age Pensioners, Average Monthly Pension and Percentage of Pensioners to Population over 70 years of age, by Provinces, as at December 31, 1951	155
Table 35	Number of Blind Pensioners and Average Monthly Pension, by Provinces, at December 31, 1951	155
Table 36	Number of Recipients, Average Monthly Assistance and total Federal Payments under the Old Age Assistance Act, by Provinces, at March 31, 1952	156
Table 37	Number of Recipients, Average Monthly Allowance and Total Federal Payments under the Blind Persons Act, by Provinces, at March 31, 1952.	156
	PHYSICAL FITNESS	
Table 38	Summary of Amounts Available for and Paid to Provinces under the National Physical Fitness Act	157
Table 39	Summary of Allotments and Expenditures, Physical Fitness Division, Fiscal Year 1951-52, and Assistance to Provinces	158
Table 40	Assistance to Provinces and Provincial Expenditures under the National Physical Fitness Act, 1951-52	159
	DEPARTMENTAL EXPENDITURES	
Table 41	Expanditures Department of National Health and Wolfers 1051 59	160

Table 1 (Civil Service Health Division)

HEALTH UNIT STATISTICS FOR THE 5-YEAR PERIOD ENDING 31 MARCH, 1952.

	1947-48	1948-49	1949-50	1950-51	1951-52
Number of personnel under supervision	9,710	13,656	15,223	17,480	20,249
Number of Health Units in operation	10	12	14	17	17
Total. First visit.	35,669 25,135	67,591 47,723	105,439 75,117	136,941 94,122	169,084 123,024
Repeat visitVisits by sex—	10,534	19,868	30,322	42,819	46,060
TotalMales	35,669 13,251	67,591 27,072	105,439 45,427	136,941 62,157	169,084 78,701
Females	22,418 35,669	40,519 67,591	60,012 105,439	74,784 136,941	90,383
Total Illness. Accident.	15,326 4,590	26,710 8,252	40, 497 10, 675	56,043 12,941	169,084 66,300 16,524
Consultation	4,719 11,034	8,919 23,710	11,946 42,321	16,885 51,072	21,655 64,605
Classification of first visits— Total	25,135	47,723	75, 117	94,122	123,024
Respiratory	6,514 3,233	12,844 6,140	21,054 11,308	29,566 13,592	35,008 17,583
Skin and cellular	1,309 2,347	2,794 3,721	3,882 5,074	5,525 5,405	7,432 7,067
Emotional disorders	345 40	902 40	1,276 57	1,537 63	2,179 223
Non-industrial injuries Industrial injuries	1,786 1,048	3,843 1,826	5,143 2,487	6,026 3,027	6,934 4,405
Ill-defined and all others	8,513	15,613	24,836	29,381	42,193
Total. Sent home	35,669 749	67,591 1,614	105,439 2,158	136,941 3,735	169,084 3,980
Referrals—	34,920	65,977	103,281	133, 206	165, 104
Total	2,021 544	4,320 839	6,114 1,466	7,927 2,373	9,606 2,825
Referred to family physician	1,477	3,481	4,648	5,554	6,781
Average monthly number of employee Health Unit visits per 100 personnel supervised	33	40	58	65	70

Table 2 (Civil Service Health Division)

HEALTH UNIT STATISTICS—BY MONTHS FISCAL YEAR 1951-1952

1	Total	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
										1			
Number of Health Units in operation		17,757	17,866	17,843	18,060	18,241	18,467	18,507	18,623	18,202	19,714	21,362	20,249
Total Total First visit. Repeat visit.	169,084 123,024 46,060	12,460 8,621 3,839	13,419 9,438 3,981	12,602 9,027 3,575	11,745 8,347 3,398	12,485 8,934 3,551	13,437 9,682 3,755	14,719 10,778 3,941	16,412 11,969 4,443	14,234 10,834 3,400	16,718 12,506 4,212	14,840 10,989 3,851	16,013 11,899 4,114
Total Male Female Nature of Visits—	169,084 78,701 90,383	12,460 5,726 6,734	13,419 6,417 7,002	12,602 5,967 6,635	11,745 5,592 6,153	12,485 5,955 6,530	13,437 6,211 7,226	14,719 7,152 7,567	16,412 7,477 8,935	14,234 6,432 7,802	16,718 7,556 9,162	14,840 7,068 7,772	16,013 7,148 8,865
Total Illness Accident Consultation Return to work visits	169,084 66,300 16,524 21,655 64,505	12,460 5,224 1,432 1,593 4,211	13,419 5,408 1,641 1,853 4,517	12,602 4,937 1,448 1,573 4,644	11,745 4,803 1,367 1,769 3,806	12,485 5,032 1,270 1,774 4,409	13,437 5,261 1,300 1,784 5,092	14,719 5,791 1,337 2,040 5,551	16,412 6,104 1,555 2,144 6,609	14,234 5,328 1,236 1,414 6,256	16,718 6,330 1,352 2,030 7,006	14,840 5,737 1,291 1,748 6,064	16,013 6,345 1,295 1,933 6,440
Total Respiratory Digestive Skin and cellular Menstrual disorders Emotional disorders Contagious diseases. Accidents non-industrial Accidents industrial Ill-defined and all others.	123,024 35,008 17,583 7,432 7,067 2,179 223 6,934 4,405 42,193	8,621 2,159 1,239 500 540 143 499 419 3,104	9,438 1,838 1,438 1,438 155 608 155 8 713 366 3,561	9,027 1,525 1,617 679 645 164 164 9 9 9 591 591 346 3,451	8,347 1,245 1,447 746 546 173 613 325 3,247	8,934 1,491 1,832 681 520 199 6 573 308 3,324	9,682 2,934 1,438 1,438 574 146 3,207	10,778 3,257 1,334 1,334 610 106 7 7 594 3,849	11,969 3,995 1,430 577 702 246 111 607 414 3,987	10,834 4,122 1,372 558 542 166 16 503 305 3,252	12,506 4,593 1,530 668 626 1191 30 664 390 3,814	10,989 3,824 1,423 1,423 530 220 220 35 35 3493 3,493	11, 899 4, 025 1, 483 1, 483 1296 210 86 88 581 391 3, 904
Total Sent home Referrals— Total Total Referred to Health Centre Referred to family physician	169,084 3,980 165,104 9,606 2,825 6,781	12,460 254 12,206 727 242 485	13,419 235 13,184 766 250 516	12,602 251 12,351 792 236 556	11,745 235 11,510 743 255 488	12, 485 12, 220 809 258 551	13, 437 335 13, 102 749 224 525	14, 719 14, 319 880 248 632	16,412 374 16,038 912 247 665	14,234 355 13,879 669 163 506	16,718 432 16,286 912 251 661	14,840 381 14,459 779 235 544	16,013 463 15,550 868 216 652
Moretica to tailing puysician	10110	200	010	000	400	100	070	250	600	one	100	110	

Table 3 (Civil Service Health Division)

HEALTH CENTRE STATISTICS FISCAL YEAR 1951-52

FISCAL 1 EAR 1901-02	
Number of Visits	
Total First visit Repeat visit	6,844 3,041 3,803
Visits by Sex	
Total	6,844 4,455 2,389
Physical Examinations	
Total. Pre-employment, permanency, etc. Obligatory examination with immunization. Voluntary. Other.	2,737 1,165 253 715 604
Other Services	
Total. Accident industrial. Accident non-industrial. Immunization. Consultation, interview, etc.	4,107 57 431 1,070 2,549
DISPOSAL	
Total. Returned to work. Sent home.	6,844 6,755 89
Referred to Family Physician	114
Total Laboratory Procedures	4,140
X-Ray	
Total. Chest. Chest (Photo-roentgen unit). Other.	4,212 1,429 2,120 663

Table 4 (Civil Service Health Division)

ACTIVITIES OF CONSULTANT PSYCHOLOGIST FISCAL YEAR 1951-52

Number of Consultations, Interviews, Etc.—	559
Total	313
First Interview	
Repeat Interview	246
First Interviews by Sex—	
Total	313
Male	213
Female	100
Pelilaic	200
Sources of Referral (First Interviews)	
Total	313
Nursing Counsellors	227
	14
Health Centre Clinicians	30
Psychiatrist	
Individual request, personnel, etc	42
CHIEF CAUSES FOR REFERRAL (First Interviews)	
Total	313
Vocational Guidance	111
	74
Job Dissatisfaction	
Personal Maladjustments	56
Examination Failures	28
Health Factors and Physical Disabilities affecting Job Efficiency	27
Miscellaneous	17
STAFF CONSULTATIONS	
Consultations with personnel and administrative officers, supervisors and induction	
interviews with nursing counsellors	75

Table 5 (Civil Service Health Division)

RETIREMENTS FROM SERVICE—ACCORDING TO DISABILITY FISCAL YEAR 1951-52

Male — 180

Female — 45

Total — 225

C			Age G	ROUPS		
Cause of Disability	Under 40	40-44	45-49	50-54	55-59	Total
Infective and Parasitic	2	0	0	4	10	- 16
NeoplasmsAllergic, endocrine,	0	0	2	1	16	19
metabolic, nutritional	0	1	1	2	5	9
Blood and Blood Forming	0	0	0	0	2	2
Mental psychoneurotic personality	3	4	2	13	18	40
Nervous systems and sense organs	0	0	0	6	11	17
Circulatory	2	3	2	16	45	68
Respiratory	0	0	1	1	2	4
Digestive	0	0	2	2	8	13
Genito-urinary	0	0	0	0	2	3
Bones and organs of movement	2	0	3	6	14	25
Congenital malformation	ő	0	0	1	0	1
symptoms and Ill-defined	ő	0	0	0	3	3
Accidents and results of old injuries	ő	ő	0	2	2	4
Total	10	8	13	55	139	225

Table 6 (Food and Drug Divisions)

	1059
DRUGS EXAMINED	Mr. Appril 18m 1951 no Mapon 31cm 1959
	Front

ed Other Infractions	7	-	5	7 139	2	0 326	4 470
Misbranded	947	774	104	1,017	1,142	520	4,604
Adulterated	30	29	290	56	81	112	628
Grand	4,910	15,409	1,381	18,737	7,992	5,886	54,315
Passed by Inspectors at Customs	3,400	12,961	196	16,601	6,302	3,888	43,348
Total	1,510	2,448	1,185	2,136	1,690	1,998	10,967
Imports	1,304	1,141	22	1,652	1,364	686	6,472
Domestic	206	1,307	1,163	484	326	1,009	4,495
Laboratory	Halifax	Montreal	Ottawa	Toronto	Winnipeg	Vancouver	Totals

Table 7 (Food and Drug Divisions)

EXAMINATION OF DOMESTIC FOODS

From: April 1st, 1951 to March 31st, 1952

			LABOR	ATORIES					Other	
-	Hali- fax	Mont- real	Ot- tawa	Toron-	Winni- peg	Van- couver	Adul- terated	Mis- branded	Infrac.	Totals
Alimentary Pastes	4	1	4	2	20	1	4	18		32
Baking Powder, Leavening					7	37	9	14		77
Agents or Chemicals Bakery Products—Cakes,	17		1	15	,	01	9	14		
Pastry, etc	11		40	38	57	20	10	49		166
Beverage and Beverage				***	000		40	100		* 000
Concentrates	205	368	17 211	190	226 35	76	48	189 25		1,082 277
Breakfast Foods	16	9	211	8 3	19		7	18		38
Confectionery	38	12	12	57	33	31	7	89		183
Dairy Products	149	1,104	128	454	151	115	1,270	70		2,101
Dessert Powders and Mixes	47		43	9	27		7	44		126
Eggs and Egg Products	1		3		3					7
Fish and Fish Products	149	8	18	1	29	159	26	36		364
Food Colours and Flavours	91	6	13	29	26	7	8	102		172
Foods, Oriental				*******		2		2		2
Fruits, Fresh			12			16	16	1		28
Fruits, Canned	4		8	4	20	3	19	7		39 76
Fruits, Dried	25		37	1	19	9	1	17 10		22
Fruits, Glazed or Candied	3 4	*******	6	.,	19	*******	1	10		10
Gelatin	17	114	1	2	25	35	20	42		194
Jams and Jellies	3		6	5	23	2	3	6		39
Juices and Syrups	122	159	5	2	291	49	10	76		628
Lard and Shortening	1	5	7			4	1	5		17
Liquors, Distilled and				2000						
Fermented	41		60			6		5	6	107
Meat and Meat Products	160	930	206	106	337	490	421	76		2,229
Nuts	7	2	13	27	32	36	6	26		107 25
Oils		7	1	12	5	7	1	5		24
Pickles	1 4	1	1	3	16 1	7		2		11
Salad Dressings, Sandwich	-			0	-			-		***
Spreads and Other										
Condiments	1	2	43	52	38	25	33	36		161
Soup and Soup Mixes	1		17	2	11		2	5		31
Spices	3	10	4	39	38	131	49	39		225
Sugar and Substitutes	3	2	3	4	5		1	4		17
Sweeteners, Artificial					2			2		2
Syrups and Molasses	6	1	20	26	12	1	8	12		66
Vegetables, Canned	14	575	19	3	24	56	87	272		676 26
Vegetables, Dried Vegetables, Fresh	4	1	16	3	3	1	2	2 5		23
Vinegar			10	6	19	17	8	8		42
Water	32	3	4		4			2		43
Miscellaneous	12		51	20	30		10	25		113
Grand Totals	1,210	3,316	1,034	1,124	1,582	1,342	2,100*	1,347*	6*	9,608

^{*} These totals are not included in the righthand column.

Table 8 (Food and Drug Divisions)

EXAMINATION OF IMPORTED FOODS

From: April 1st, 1951 to March 31st, 1952

			LABOR	ATORIES					Other	
-	Hali- fax	Mont- real	Ot- tawa	Toron-	Winni- peg	Van- couver	Adult- erated	Mis- branded	Other Infrac- tions	Totals
Alimentary Pastes	3		2		1			3		6
Baking Powder, Leavening										
Agents or Chemicals	8	1		1	4	3		10		17
Bakery Products-Cakes,			E 1780					1		
Pastry, etc	4	9	2	-17	15	26		38		73
Beverage and Beverage				40		00	10			
Concentrates	37	6	1	12	9	33	12	42		98
Bread, Flour and Cereals Breakfast Foods	11 2	9 4	4	2	4	7		13	*******	37
Confectionery	101	48	1	28	119	295	48	143		592
Dairy Products.	27	93	1	31	4	79	13	50		235
Dessert Powders and Mixes	11			3		1		9		15
Eggs and Egg Products						1				1
Fish and Fish Products	12	7	1	10	473	237	27	63		740
Food Colours and Flavours	25			- 3	11	32	1	23		71
Foods, Oriental	2				54			54		56
Fruits, Fresh	1			3			1			4
Fruits, Canned	2		6	8		60	2	8		76
Fruits Dried	181	249		74	969	745	21	16		2,218
Fruits, Glazed or Candied	22		67		3	10	10	5		35 67
Gelatin			01			5	10	1		5
Jams and Jellies	35	1			6	68	17	25		110
Juices and Syrups	43	4		2	6	54	18	40		109
Lard and Shortening	3							3		3
Liquors, Distilled and				211111111111111111111111111111111111111						
Fermented	1				1			1		2
Meat and Meat Products	122	1	13	27	16	399	90	58		578
Nuts	164	533	14	240	1,682	387	166	33		3,020
Oils	6	13		3	3	14		8		39
Pickles	10					11				21
Preservatives		*******		********	1	*******		1	*******	1
Condiments	31	4	2	12		17	6	32		66
Soup and Soup Mixes			5		1			3		6
Spices	29	150	1	24	46	58	13	41		308
Sugar and Substitutes										
Sweeteners, Artificial					1			1		1
Syrups and Molasses	202	649		3	5	5	2	7		854
Vegetables, Canned			3	10		28		23		41
Vegetables, Dried	3			1	4	5		8		13
Vegetables, Fresh	2 5	07		11		4 4	5	6 4	4	17 36
Vinegar Water	3	27			*******	1	1	4	1	90
Miscellaneous	20		8	4	42	8	42	44		82
Grand Totals	1,125	1,808	131	529	3,481	2,596	496*	819*	4*	9,670

^{*} These totals are not included in the righthand total column.

(Narcotic Control Division) TABLE 9

CONVICTIONS UNDER THE OPIUM AND NARCOTIC DRUG ACT FOR THE JUDICIAL YEAR ENDED SEPTEMBER 30, 1951

	Totals		******	******		:	58	80	17	60	13	205	376
	Codeine						-			1	:	63	4
	Morphine		:				C4	6		-		1	12
)LVED	Demerol		-				00	:			:	1	4
DRUGS INVOLVED	Marihuana					******	9	60	-		1	:	10
DRUG	Heroin						45	68	16	6.3	10	196	337
	Occaine		*****				1	:	1	:	1		00
	Poppy Heads					*******			-		1	1	64
	muiqO		7,		-	-						4	4
	Totals			***********			58	80	17	60	13	205	376
	Professional Cases Under Sect 6 of the												
NATURE OF OFFENCE	Growing Cann. Sativa				· · · · · · · · · · · · · · · · · · ·						1		1
NATURE O	Trans-						00	1	2			1	7
	Selling, Offering Giving Away and Delivery						9	5	1		63	15	29
	Pos- session of Drugs	7					49	74	14	00	10	189	339
	Province		Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Totals

Table 10 (Narcotic Control Division)

ESTIMATED CONSUMPTION OF THE MAIN NARCOTICS FOR THE PERIOD 1942-1951 INCLUSIVE

Unit of Weight-Ounce, Pure Drug

1	-	-								
Raw Opium and Preparations	fedicina pium an Prepara- tions	- T	Morphine	Heroin	Cocaine	Ethyl- morphine	Dilaudide	Papaverine	Codeine	Demerol
3,562 8,219	8,219	-	3,704	917	1,517	615	14	138	21,983	
3,704 5,645	5,645	-	4,445	811	1,623	739	12	171	21,630	
3,810 7,090	7,090		3,633	740	1,480	1,458	14	280	22,241	1,042
3,175 6,314	6,314		3,351	029	1,305	169	12	381	22,809	1,102
3,422 4,797	4,797		3,492	1,058	1,552	1,110	22	455	36, 191	2,045
3,932 4,734	4,734		3,090	881	1,390	1,107	15	715	36,484	5,894
2,090 6,026	6,026		3,074	982	1,407	1,032	22	1,416	39,672	5,642
2,010 3,606	3,606		2,718	888	1,197	949	16	1,359	44,443	6,852
2,330 5,375	5,375	_	2,613	1,000	1,408	1,103	16	1,632	45,582	7,270
2,020 5,693	5,693	-	2,525	928	1,270	1,561	15	1,362	56,384	8,916
		-				-				-

Table 11 (Narcotic Control Division)

IMPORTS OF MAIN NARCOTICS For Period 1942-1951 Inclusive

Unit of Weight-Ounce, Pure Drug

Amidone		***************************************					892	1,068	92	73
Demerol			1,211	2,085	5,539	9,018	5,175	4,106	5,480	9,189
Codeine	15,291	9,777	26,149	23, 122	35,885	36,915	34,058	37,751	93,269	37,274
Dilaudide Papaverine	122	46	354	571	802	196	2,809	943	1,292	1,672
Dilaudide	14	14	10	19	23	18	26	11	21	17
Ethyl- morphine	147	844	2,131	1,195	664	745	919	1,433	1,207	1,098
Cocaine	1,831	2,338	. 1,233	361	1,797	2,169	993	999	1,344	1,053
Heroin	682	964	468	762	1,020	906	1,019	906	748	1,014
Morphine	2,865	4,360	5,229	4,791	1,181	1,046	3,013	3,168	2,337	3,076
Medicinal Opium and Prepara- tions	2,088	9,390	416	3,842	4,614	6,458	3,040	3,202	4,000	4,423
Raw Opium		1,344	1,056	4,000	4,000	3,360	3,200	1,720	1,609	1,928
Year	1942	1943.	1944	1945	1946	1947	1948	1949	1950	1951

Table 12 (Immigration Medical Service)

SUMMARY OF ACTIVITIES

FISCAL YEAR 1951-52

						FISCAL YEAR 1951-52			
CANAD	A:								
No Ce	on-imn ertified	nigrants as "prol	medic hibited	ally ins	pec er I	on arrival at ocean and air pated on arrival at ocean and mmigration Act, Section 3, Section 3 (c)	air ports (a), (b) and (k).		203,450 20,232 49 235
OVERS	EAS-(United I	Kingdo	om, Cor	ntin	ent and Orient)			
Ce	ertified ertified	as "prol	hibited ically	l'' unde defectiv	er I	examined	(a), (b), (k) and	(1)	303,467 $3,884$ $26,658$ $26,864$
U		ingdom:		ants me	dic	ally examined			82,548
Ce		t of Euro	-	ints me	die	ally examined			217,855
Or	rient:	nostivo	omian	nto me	dia	ally examined			3,064
	Fros	pective	emigra			LS OF EXAMINATIONS			3,004
120				DEI	AI	LS OF EXAMINATION			
EXAMI	NATION	S OVERS	SEAS:				Examinations		Re- nations
В	v Cana	dian Me	edical	Officers	in	British Isles	71,163		,520
B	y Rost	er Docto	ers in 1	British !	Isle	S	11,385		654
B	y Cana	dian Me	edical	Officers	on	the Continent	189,994	17	,231
						ent	27,861	1	,427
B	y Rost	er Docto	ers in t	he Orie	ent.		3,064		-
							303,467 136,755		,832 ,560
Ехамі	NATION	NS OVER	SEAS:						
В	y Cana	dian Me	edical	Officers	in	London			29,889
		16	"	"		Liverpool			
			"	"		Glasgow			18,011
		16	"	"		Belfast			5,135
		14	"	"		Paris			23,423
			"	**		Brussels			17,407 34,057
	6		"	**		The Hague Copenhagen			2,908
		16	66	"		Stockholm			75
		16	66	"		Bremen			6,423
		i i	66	"	in	Hannover			14,506
				"		Karlsruhe			18,455
		ce ce	"	"	-	Linz			12,877
						Rome			59,863
В	y most	er Dock				es			11,385 27,861
		"							6
		"							54
•		"	in	China.					3,004
		Total							303,467

(Table 12-ctd)

DETAILS OF EXAMINATIONS FISCAL YEAR 1951-52

Examinations in Canada:	Immigrants	Non- Immigrants
Gander, Newfoundland	7,920	2,725
St. John's, Newfoundland	1,000	306
Harmon Field, Newfoundland	280	112
Halifax, N.S.	106,093	1,459
North Sydney, N.S.	3	179
Sydney, NS	163	294
Louisburg, N.S.	10	14
Saint John, N.B.	6,924	313
Campbellton, N.B.	19	3
Chatham, N.B.	25	10
Moneton, N.B.	149	148
Quebec, P.Q.	51,557	6,750
Port Alfred, P.Q.	72	31
Sorel, P.Q.	32	9
Three Rivers, P.Q.	18	ĩ
Dorval, P.Q.	10,786	4,971
Montreal, P.Q.	1,241	516
Malton, Ont.	376	478
Vancouver, B.C.	1,670	1,395
Victoria, B.C	87	100
Ports (not stated)	160	0
U. S. A. Ports.	14,820	393
Other Canadian Ports.	45	22
Totals	203,450	20,232

Rejections — 347

Table 13 (Immigration Medical Service)

CERTIFICATIONS UNDER SECTION 3 OF THE IMMIGRATION ACT FISCAL YEAR 1951-52

E	IOTAL	411	3,555	28,104	57	7	32,134
OF EUROPE	Examined by Roster Drs.	26	540	2,142	63	1	2,712
CONTINENT OF EUROPE	Examined by Can. M.O's	258	1,774	17,800	28	5	19,865
I Isles	Examined by Roster Drs.	16	126	1,118	67	1	1,263
BRITISH ISLES	Examined by Can. M.O's	101	1,077	6,809	23		8,010
CANADA Ocean and	Air Ports	10	38	235	1		284
		Certified under: SS (a) Mental Diseases and Defects	SS (b) Loathsome and Contagiqus Diseases	SS (c) Physical Defects	SS (k) Constitutional Psychopathic Inferiority	SS (1) Chronic Alcoholism	Total

Table 14 (Quarantine Service)

SHIPS BOARDED BY QUARANTINE OFFICERS, 1951-52

The following table indicates the number of ships boarded during the fiscal year 1951-52, also total personnel on board, divided into their respective groups

A I
v caseus
pected
614
342
1,325
535
2,816

Table 15 (Sick Mariners Service)

TOTAL NUMBER OF VESSELS—DUES COLLECTED AND EXPENDITURES

CALENDAR YEAR 1951

Average Expenditure for each member of Crew	\$ cts.	2 85	11 47	4 43
Total Expenditure	\$ cts.	253,475 50	229,030 79	482,506 29
Total Number of Crew		88,917	19,974	108,891
Total Dues Collected	\$ cts.	255,215 27	14,897 87	270,113 14
Number Vessels Paying Dues		2,305	4,910	7,215
Vessels		Foreign	Vessels Trading Continually between Canadian Ports	Total

Table 16 (Quarantine Service)

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Rodents Recovered	Mice	144	2		102		275
Rodents I	Rats	7	267		100		394
Total	Vessels Inspected	131	272 17	200	145 362	4	824
Vessels	ertificates endorsed		61		195	92	289
Vessels inspected and	remanded or time extended	77	∞ ⊣		315	9	125
Vessels inspected and	exemption certificates issued	43	30 47 8	2 10 01	107		342
Vessels inspected,	deratization certificates issued	. 111	⊢ €9		47		89
	Port	Halifax, N.S.	Saint John, N.B. Quebec, P.Q. Port Alfred P.O.	Trois-Rivieres, P.Q. Sorel P.Q.	Montreal, P.Q. Vancouver, B.C.	Victoria, B.C.	Totals

(Family Allowances Division)

NUMBER OF EMPLOYEES as at 31st March, 1951

							-
Province	Authorized Establishment	Permanent	Temporary	Total Filled	Vacancies	Casuals	Remarks
Newfoundland. Prince Edward Island Nova Scotia. Nova Scotia. New Brunswick. Quebec. Ontario. Manitoba. Saskatchewan. British Columbia. Ottawa, Yukon and Northwest Territories.	30 8 47 43 188 188 46 47 14	12 23 30 115 106 27 26 27 26 27	18 103 103 22 22 22 24 24 24 24	88 44 4 8 8 4 8 4 8 4 8 4 8 4 8 4 8 4 8	15 10 10 2 2 6 6	9	6 casuals released 31 March, 1951
Total	740	406	334	694	46	9	
	NUM	NUMBER OF EMPLOYEES as at 31st March, 1952	PLOYEES h, 1952				
Province	Authorized Establishment	Permanent	Temporary	Total Filled	Vacancies	Casuals	Remarks
Newfoundland Prince Edward Island Nova Scotia New Brunswick Quebec Ontario Manitoba Saskatchewan Alberta British Columbia Ottawa, Yukon and Northwest Territories.	30 42 196 186 44 45 45 15	14 28 30 110 109 29 28 31 12	32 421 85 5 2 3 4 4 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	28 8 14 1787 1 188 1 4 4 4 5 1	1 1608 541	II.	
Total	694	428	266	663	31		
AND THE PARTY OF T						- COUNTRACTOR OF THE PERSON OF	-

(Family Allowances Division)

FAMILY ALLOWANCES PAYMENTS
FISCAL YEAR 1951-52

And the second s	F	FISCAL YEAR 1951-52	951-52				
Province	April	May	June	July	August	September	
	66	66	66	60	60	60	
Newfoundland	869,718	874,156	876,137	-	***		
Nova Scotia		m m	323,	,325,	,327,	-	
New Brunswick	445	Fig. 1		*	-	-	
Ontario		Pa	665,	,702,	,737,		
Manitoba. Saskatchewan		W .	380,	624	,394,		
Alberta		A 100	777,	,789,	,808,	P. P.	
British Columbia. Yukon and Northwest Territories.		Ft. 84	1,890,752	1,907,729	1,922,358	1,928,980	
	26,278,326	26,380,381	26,449,963	26,548,579	26,669,237	26,746,272	
Province	October	November	December	January	February	March	Total
	90	se.	90	99	00	00	99
Newfoundland	-	- 20		- 4-	100	-	,617,
Prince Edward Island	P1	B1-		207,	200	-	,496,
New Brunswick			163,	165.	20. 2	169	905
Juebec	-	. B.	642,	682,		726,	,074,
Ontario	392,	No. 1	850,	-	100	944,	,305,
Saskatchewan		Pr Pr		618,	Ph. 100	623,	,437,
Alberta British Columbia. Yukon and Northwest Territories.	1,814,995 1,925,095 55,982	1,807,493 1,936,103 52,773	1,815,581 1,946,351 54,992	1,818,189 1,953,215 55,386	1,817,976 1,963,551 55,265	1,825,870 1,968,705 54,081	21,600,639 23,103,962 658,072
	26,780,739	26,820,704	26,923,306	27,004,501	27,104,188	27,174,658	320,880,854

(Family Allowances Division)

FAMILIES RECEIVING FAMILY ALLOWANCES FISCAL YEAR 1951–1952

PROVINCE	April	May	June	July	August	September
Newfoundland. Prince Edward Island. Nova Scotia	PC - PC - P			P. P. F	P. P. F	
New Brunswick. Quebec. Ontario. Manitoba. Saskatchewan. British Columbia. Yukon and Northwest Territories.	72,716 526,231 629,651 108,500 118,304 136,301 161,284 4,057	72,699 527,991 631,541 108,687 118,528 136,813 161,605 4,056	72,692 529,918 633,333 108,853 118,775 137,252 162,010 4,075	72,802 531,120 635,686 109,134 119,034 137,765 162,685 4,075	72,750 532,424 637,655 109,356 119,059 138,217 163,227 4,100	72,845 534,943 639,142 109,524 119,185 163,785 4,083
	1,914,162	1,919,187	1,924,261	1,929,803	1,934,238	1,938,792
Province	October	November	December	January	February	March
Newfoundland Prince Edward Island. Nova Scotia. New Brunswick Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Yukon and Northwest Territories.	52,107 13,303 92,309 72,799 535,260 638,948 109,480 119,070 138,713 163,829 4,080	52,164 13,297 92,359 72,784 536,233 642,561 109,704 119,007 138,971 164,431 4,045	52,213 13,309 92,638 72,900 537,443 645,117 109,941 118,756 139,821 165,118 4,064	52,262 13,241 92,626 72,981 539,447 647,381 110,030 118,655 139,827 165,681 4,052	52,367 13,260 92,792 73,062 541,352 648,618 110,322 118,714 140,111 166,281 4,079	52,552 13,248 93,051 73,167 542,651 651,272 110,466 119,006 140,497 166,734 4,077
	1,939,898	1,945,556	1,951,320	1,956,183	1,960,958	1,966,721
No. of families as at 31st No. of families as at 31st	March, March,	1952		1,966,721		

Table 20 (Family Allowances Division)

CHILDREN RECEIVING FAMILY ALLOWANCES FISCAL YEAR 1951-1952

Province	Newfoundland. Prince Edward Island. Nova Scotia. New Brunswick. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Yukon and Northwest Territories.	4;	PROVINCE	Newfoundland. Prince Edward Island. Nova Scotia. New Brunswick. Quebec. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Yukon and Northwest Territories.	4,4	No. of children as at 31 No. of children as at 31 Increase
April	145,380 34,358 218,916 191,819 407,969 270,902 228,954 264,999 264,999 314,596 8,886	379,881	ctober	148,314 34,516 220,168 193,367 430,726 297,873 232,289 266,850 299,242 321,534 9,041	453,920	March, 1952. March, 1951.
May	146,015 34,386 219,144 191,979 1,413,474 1,276,014 229,519 265,501 294,422 315,640 8,883	4,394,977	November	149,081 34,633 220,559 193,502 1,434,618 1,304,206 232,914 266,805 299,752 323,000 8,904	4,467,974	1
June	146,323 34,425 219,402 192,106 1,418,011 1,280,686 230,173 265,971 295,697 316,798 8,964	4,408,556	December	149, 523 34, 723 221, 211 194, 021 1, 310, 400 233, 358 266, 486 300, 991 324, 623 8, 980	4,483,608	
July	149,093 34,423 219,628 192,497 1,420,673 1,286,605 231,357 267,675 297,541 319,228 9,001	4,427,721	January	149,849 34,529 221,350 194,326 1,444,172 1,315,097 233,920 266,535 301,785 326,158 9,018	4,496,739	4,530,186 4,367,391 162,795
August	147,049 34,473 219,836 192,850 1,423,832 1,291,164 232,232 267,867 299,424 321,209 9,022	4,438,958	February	150,368 34,671 222,008 194,955 1,449,973 1,320,736 234,660 266,902 302,427 327,920 9,145	4,513,765	
September	147,714 34,501 220,137 193,181 1,430,156 1,295,901 232,485 268,090 297,357 322,649 9,153	4,451,324	March	150,995 34,698 222,664 195,355 1,454,369 1,327,304 235,347 267,625 303,646 329,130 9,053	4,530,186	

Table 21
(Family Allowances Division

(Family Allowances Division)

CLASSIFICATION OF FAMILIES BY NUMBER OF CHILDREN

family March 31, 1946 March 31 554,026 645,6 385,464 444,4 207,241 231,4 114,992 120,8 63,676 67,0 37,352 38,0 21,486 12,164 12,164 12,164 12,164 12,164 12,164 12,132 1,132 1,132 1,132 1,132	March 31, 1948 685,251 472,448 238,512 124,277 67,602	March 31, 1949 699, 905 495, 176 254, 682 127, 679 69, 298 38, 277	March 31, 1950 730, 586 539, 831 278, 161 140, 051	March 31, 1951 733, 100 567, 206	March 31, 1952	1952 over 1951
554,026 385,464 207,241 114,992 63,676 37,352 21,486 12,164 6,210 2,871 1,132 320	- 4 2 1	699,905 495,176 254,682 127,679 69,298	730, 586 539, 831 278, 161 140, 051	733, 100		
254,026 385,464 207,241 114,992 114,992 114,992 114,992 114,992 11,164 12,164 6,210 2,871 1,132 320	0 4 4 1	699, 905 495, 176 254, 682 127, 679 69, 298	730, 586 539, 831 278, 161 140, 051	733,100		
385,464 207,241 114,992 114,992 37,352 21,486 12,164 6,210 2,871 1,132 320	4 01	495,176 254,682 127,679 69,298 38,277	539,831 278,161 140,051	567,206	738, 520	+ 5,420
207, 241 114, 992 63, 676 37, 352 21, 486 12, 164 6, 210 2, 871 1, 132 320	1 2	254,682 127,679 69,298 38,277	278,161	The same	588, 238	+ 21,032
114,992 63,676 37,352 21,486 12,164 6,210 2,871 1,132 320		127,679 69,298 38,277	140,051	292,753	309,510	+ 16,757
63,676 37,352 21,486 12,164 6,210 2,871 1,132 320		69,298	24 900	148,109	155, 531	+ 7,422
37,352 21,486 12,164 6,210 2,871 1,132 320		38,277	74,380	77,325	80,339	+ 3,014
21,486 2 12,164 1 6,210 2,871 1,132 320	37,126		41,353	42,676	43,978	+ 1,302
12,164 6,210 2,871 1,132 320	22,088	21,783	23,721	24,073	24,989	916 +
6,210 2,871 1,132 320	12,365	12, 141	13,027	13,428	13,746	+ 318
1,132	6,132	6,130	6,676	6,823	6,987	+ 164
1,132	2,766	2,653	2,895	3,065	3, 137	+ 72
320	166	1,038	1,149	1,211	1,253	+ 42
	304	301	350	330	384	+ 55
13 children	29	92	74	77	91	+ 14
14 children	. 14	10	13	11	16	+
-15 children 1 2	1	1	63	10	1	- 4
16 children.:					1	+

Table 22 (Family Allowances Division)

(Family Allowances Division)

COMPARATIVE STATEMENT OF FAMILY ALLOWANCES PAYMENTS

BETWEEN MONTH OF MARCH 1951 AND MONTH OF MARCH 1952

		Monr	MONTH OF MARCH, 1951	1921			Mon	Монтн ог Мансн, 1952	. 1952	
	Families Receiving	Receiving	Children Receiving	Receiving		Families 1	Families Receiving	Children	Children Receiving	
Province	Number	Average Allow. per Family	Number	Average Allow. per Child	Amount	Number	Average Allow. Per Family	Number	Average Allow. per Child	Amount
		\$ cts.		\$ cts.	00		\$ cts.		\$ cts.	66
Newfoundland	51,663	16 87	145,230	00 9	871,448	52,552	17 11	150,995	5 96	899,359
Prince Edward Island	13,317	15 56	34,308	6 04	207,170	13,248	15 73	34,698	0 9	208,421
Nova Scotia	92,095	14 32	218,496	6 04	1,319,063	93,051	14 43	222, 664	6 03	1,342,988
New Brunswick	72,692	15 77	191,608	5 98	1,146,587	73, 167	15 99	195,355	5 99	1,169,886
Quebec	525,358	16 06	1,405,161	00 9	8,437,090	542,651	16 08	1,454,369	00 9	8,726,127
Ontario	627,511	12 07	1,265,313	5 99	7,577,615	651,272	12 20	1,327,304	5 98	7,944,428
Manitoba	108,288	12 66	228,245	00 9	1,370,575	110,466	12 78	235,347	00 9	1,411,512
Saskatchewan	118,276	13 59	264,582	80 9	1,608,013	119,006	13 64	267,625	90 9	1,623,281
Alberta	135,864	12 91	292, 104	0 01	1,754,746	140,497	12 99	303,646	6 01	1,825,870
British Columbia	161,088	11 59	313,525	5 95	1,867,142	166,734	11 81	329,130	5 98	1,968,705
Yukon and Northwest Territories .	4,040	13 89	8,819	6 36	56, 105	4,077	13 26	9,053	5 97	54,081
National	1,910,192	13 72	4,367,391	00 9	26, 215, 554	1,966,721	13 82	4,530,186	00 9	27,174,658

Table 23 (Family Allowances Division)

INCREASE SHOWN IN COMPARING FAMILY ALLOWANCES PAYMENTS March 1951 and March 1952

Province		Number of Receiving	Increase in Children	Number of Receiving	Increase in A	mount Paid
	Number	Percent	Number	Percent	Number	Percent
Newfoundland	889	1.72	5,765	3.97	27,911	3.20
Prince Edward Island Nova Scotia	-69	-0.52*	390	1.14	1,251	0.60 1.81
New Brunswick	956 475	1·04 0·65	4,168 3,747	1.91 1.96	23,925 23,299	2.03
Quebec	17,293	3.29	49,208	3.50	289,037	3.42
Ontario	23,761	3.79	61,991	4.90	366,813	4.84
Manitoba	2,178	2.01	7,102	3.11	40,937	2.99
Saskatchewan	730	0.62	3,043	1.15	15,268	0.95
Alberta	4,633	3.41	11,542	3.95	71,124	4.05
British Columbia	5,646	3.51	15,605	4.98	101,563	5.44
Territories	37	0.92	234	2.66	-2,024*	-3.61*
National	56,598	2.96	162,795	3.73	959,104	3.66

^{*} In the case of Prince Edward Island and Yukon and Northwest Territories the figure shown is a decrease.

Table 24
(Family Allowances Division)

AVERAGE ALLOWANCE PER FAMILY AND PER CHILD March 1952

Province	Average per Family	Average per Child
	\$ cts.	\$ cts.
Newfoundland	17 11	5 96
Prince Edward Island	15 73	6 01
Nova Scotia	14 43	6 03
New Brunswick	15 99	5 99
Quebec	16 08	6 00
Ontario	12 20 12 78	5 98 6 00
Manitoba.	13 64	6 06
Alberta	12 99	6 01
British Columbia.	11 81	5 98
Yukon and Northwest Territories	13 26	5 97
National.	13 82	6 00

Table 25
(Family Allowances Division)

OVERPAYMENTS OF FAMILY ALLOWANCES REMAINING UNPAID MARCH, 1952

(The Overpayments may have occurred at any time between July 1, 1945 and March 31, 1952)

								1
	Overpa Recov by De	Overpayments Recoverable by Deduction	Overpa Recov by Col	Overpayments Recoverable by Collection	Overpaymen Considered Uncollectibl	Overpayments Considered Uncollectible	To Overpa Outsta	Total Overpayments Outstanding
FROYINGE	Number of Accounts	Amount	Number of Accounts	Amount	Number of Accounts	Amount	Number of Accounts	Amount
		\$ cts.		\$ ots.		\$ cts.		\$ cts.
Newfoundland	29	1,746 00	33	209 00	00	150 36	108	2,605 36
Prince Edward Island	15	420 00	23	19 00	2	47 00	19	486 00
Nova Scotia	68	2,331 00	140	3,494 25	32	1,325 00	261	7,150 25
New Brunswick	- 113	3,507 00	189	5,201 65	119	5,788 50	421	14,497 15
Quebec	632	46,052 30	1,808	133, 127 75	851	69,061 63	3,291	248,241 68
Ontario	206	8,218 49	986	25, 239 46	444	19,106 90	1,636	52,564 85
Manitoba	69	2,443 00	88	1,894 50	53	2,683 00	211	7,020 50
Saskatchewan	53	3,530 97	93	3,523 35	46	2,526 00	192	9,580 32
Alberta	86	2,608 00	121	3,291 00	88	4,962 90	308	10,861 90
British Columbia	122	5,205 56	165	6,508 40	86	3,941 75	385	15,655 71
Northwest Territories and Yukon	22	640 00	30	1,560 80	17	843 52	69	3,044 32
National	1,486	76,702 32	3,656	184, 569 16	1,759	110,436 56	6,901	371,708 04

TABLE 26

(Family Allowances Division)

OVERPAYMENTS OF FAMILY ALLOWANCES REMAINING UNPAID MARCH 31, 1952, COMPARED TO MARCH 31, 1951

(These overpayments may have occurred at any time between July 1, 1945 and March 31, 1952)

PROVINCE	March 1951 Total Overpayments Outstanding	1951 payments nding	March 1952 Total Overpayments Outstanding	n 1952 rpayments inding	Increase or decrease in
	Number of Accounts	Amount	Number of Accounts	Amount	payments since 31st March 1951
		\$ cts.		\$ cts.	s cts.
Newfoundland	69	2,081 00	108	2,605 36	+ 524 36
Prince Edward Island	29	702 00	19	486 00	- 216 00
Nova Scotia	238	8,550 00	261	7,150 25	- 1,399 75
New Brunswick	393	13,882 15	421	14,497 15	+ 615 00
Quebec	4,079	308,623 95	3,291	248,241 68	- 60,382 27
Ontario	1,435	61,530 65	1,636	52,564 85	- 8,965 80
Manitoba	185	5,846 50	211	7,020 50	+ 1,174 00
Saskatchewan	195	8,809 30	192	9,580 32	+ 771 02
Alberta	309	12,278 91	308	10,861 90	- 1,417 01
British Columbia	351	13,022 25	385	15,655 71	+ 2,633 46
Yukon and Northwest Territories	29	3,074 52	69	3,044 32	- 30 20
	7,350	438,401 23	6,901	371,708 04	- 66,693 19

Table 27 (Family Allowances Division)

BREAKDOWN OF OVERPAYMENTS

DISCOVERED IN FISCAL YEAR ENDED MARCH 31, 1952

PROVINCE	Birth Date Errors	irth Date Errors	Non-School Attendance	School	Non- Maintenance	n- nance	Child Deceased	ild	No Resid	Non- Residence	Duplicate Accounts	icate
	Accounts	Accounts Amount Acc	ounts	Amount	Accounts	counts Amount	Accounts	Amount	ounts Amount Accounts Amount	Amount	Accounts	Amount
		00		69		00		00		00		00
Newfoundland	6	359	179	1,841	21	551	21	508	5	102		
Prince Edward Island	20	23.00	322	4 582	4 49	2 598	63 4	275	12	478	2	247
New Brunswick	00	145	737	16,906	63	1,457	11	355	17	677		
2uebec	136	10.869	549		428		334		108	3,588	54	10,367
Intario	5	370	200		252		168	7,086	57	1,692	20	1,635
fanitoba	6	343	163		125		18		15	408		
Saskatchewan	20	826	84	-	132		43	1,372	21	540	4	71
Alberta	10	1.001	219		189		44		18	812		
British Columbia	9	247	199	-	212		42		46	1,489	. 4	101
Yukon and Northwest Territories	7	166			151		22	3,108	1	5	4	1,477
National	209	14,549	2,998	73,226	1,641	618,99	744	30,006	304	9,833	88	13,898

TABLE 27 (Cont'd)

BREAKDOWN OF OVERPAYMENTS

DISCOVERED IN FISCAL YEAR ENDED MARCH 31, 1952 (Cont'd)

Accounts Amount Accounts Bcs Bcs	Immig	Immigration Requirements	Internal Errors	rnal	Working for Wages	king ages	Otl	Other Causes	To	Total
8 \$ \$ \$ 139 132 2,632 3 110 378 13 327 104 1,436 3 2294 529 140 11,837 1,657 33,349 53 4,976 3,459 1,656 39 8 1,055 1,612 29,263 28 1,635 2,675 1,619 39 8 168 127 2,470 7 140 569 1,619 2,429 7 87 448 1,619 2,429 7 87 448 1,619 2,439 3 30 697 1,256 1,25		Accounts Amount	Accounts	Amount	Accounts	Amount	Accounts	Amount	Accounts	Amour
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		69		00		00		60		00
13 327 104 1,436 3 32 529			80	139	132	2,632	3	110	378	6,242
6 218 82 954 6 294 925 1 140 11,837 1,657 33,349 53 4,976 3,459 1 33 1,055 1,612 29,263 28 1,635 2,675 1 8 196 227 2,470 7 87 448 569 19 441 195 3,498 3 30 697 448 25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3			13	327	104	1.436	60	32	529	901
140 11,837 1,657 33,349 53 4,976 3,459 1 33 1,055 1,612 29,263 28 1,635 2,675 1 8 196 127 2,470 7 87 448 19 441 195 3,498 3 30 697 25 1,236 220 2,397 2 18 756 2 40 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3	:		9	218	82	954	9	294	925	21,006
33 1,055 1,612 29,263 28 1,635 2,675 5 196 127 2,470 7 140 569 8 168 127 2,429 7 87 448 19 441 195 3,498 3 30 697 25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3			140	11,837	1,657	33,349	53	4,976		146,285
5 196 227 2,470 7 140 569 8 168 127 2,429 7 87 448 19 441 195 3,498 3 30 697 25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3			33	1,055	1,612	29,263	28	1,635		61,800
8 168 127 2,429 7 87 448 19 441 195 3,498 3 30 697 25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3			5	196	227	2,470	7	140	569	9,485
19 441 195 3,498 3 3 697 25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3		39	00	168	127	2,429	7	87	448	12,518
25 1,236 220 2,397 2 18 756 2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3	:		19	441	195	3,498	00	30	269	15,844
2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3	:		25	1,236	220	2,397	22	18	756	17,379
2 40 9 881 231 259 15,657 4,357 78,430 121 8,203 10,723 3			((-	
259 15,657 4,357 78,430 121 8,203 10,723	:		2	40			6	881	231	9,466
		39	259	15,657	4,357	78,430	121	8,203	10,723	310,660

TABLE 28 (Family Allowances Division)

BIRTH VERIFICATION

Province	Balance still to be verified March 31, 1950	Balance still to be verified March 31, 1951	Balance still to be verified March 31, 1952
Newfoundland	30,528	9,826	9,393
Prince Edward Island	230	597	980
Nova Scotia	1,432	5,039	10,102
New Brunswick	4,479	3,850	6,390
Quebec	88,905	51,621	49,469
Ontario	17,883	28,659	23,648
Manitoba	2,642	4,089	8,001
Saskatchewan	2,491	2,941	6,624
Alberta	3,276	4,790	9,060
British Columbia	4,642	4,890	13,681
Yukon and Northwest Territories	313	267	601
National	156,821	116,569	137,949

Table 29
(Family Allowances Division)

(Family Allowances Division)
SCHOOL ATTENDANCE AND WORKING FOR WAGES
COMPARATIVE STATEMENT—1950-51 AND 1951-52

	Number	Number of Children	en whose	Allowance	s were Su	spended	whose Allowances were Suspended Number of Children whose Allowances were Reinstated	of Children	n whose A	Ullowances	were Rei	nstated
PROVINCE	Worki	Working for Wages	Unlawful Absence from School	wful e from ool	Total	tal	Having ceased to Work	ceased	Having resumed School Attendance	resumed ool dance	School	loo
	1950-51	1951-52	1950-51	1951-52	1950-51	1951-52	1950-51	1951-52	1950-51	1951-52	1950-51	1951-52
Newfoundland Prince Edward Island. Nova Scotia New Brunswick. Ouebec Ontario Manitoba Saskatchewan British Columbia Yukon and Northwest Territories	242 395 395 418 9,655 9,855 1,053 1,053 1,154 5	431 23 24 25 262 10,082 8,668 1,025 1,107 1,107 1,192 1,192 1,28	3,090 1,305 2,324 1,309 2,088 2,088 656 1,160 650 650	3,553 764 1,512 3,121 1,461 2,046 638 282 904 548 1	3,336 691 1,700 2,742 10,964 11,432 1,523 1,523 1,804 1,804 8	3,984 2,074 3,536 11,543 10,714 1,663 640 2,011 1,740 1,740	79 149 36 698 545 35 167 167 167 167	275 6 275 59 407 550 83 128 486 82 82 82 82	3,059 652 866 637 1,631 1,590 365 267 809 329	3,354 764 895 1,715 1,094 1,301 496 269 883 297	3,138 662 1,015 673 2,329 2,135 400 283 976 424	3,446 1,770 1,774 1,501 1,851 1,369 1,369 1,369 13,244

Table 30 (Family Allowances Division)

TRANSFER OF FAMILY ALLOWANCES ACCOUNTS BETWEEN PROVINCES FISCAL YEAR 1951-52

Total	2, 2, 3, 3, 3, 3, 2, 32 3, 3, 4, 6, 7, 46, 7, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6, 6,	38, 531 2, 380 3, 169 3, 169 3, 169 4, 204 4, 204 2, 204 2, 204 3, 104 3, 104 3, 104 3, 104 3, 104
Yukon and Northwest Territories	25 25 25 25 25 25 25 25 25 25 25 25 25 2	340 272 273 274 275 275 276 277 277 277 277 277 277 277 277 277
British	340 425 425 532 630 630 630 630 630 630 630 630 630 630	5,996 380 434 434 523 449 520 458 361 288 235 267 259 4,377
Alberta	244 411 455 465 560 540 550 560 570 580 595	4,829 311 329 384 435 363 602 469 558 220 539 337 327
Saskat- chewan	215 327 328 328 241 240 254 254 264 264 278 280 280 280 280 280 280 280 280 280 28	3,007 227 337 334 346 408 583 515 620 620 502 324 246
Manitoba	208 289 252 274 297 297 297 297 297	3,294 259 313 386 330 450 450 393 290 311 212 240 4,038
Ontario	734 795 1,052 899 1,395 1,139 1,115 884 643 707	11, 613 490 564 806 652 696 834 1,096 636 593 610 587 8,378
Quebec	329 301 458 403 278 354 503 456 488 375 407 324	4,676 427 427 414 411 370 500 498 390 310 284 4,831
New Brunswick	80 128 148 140 127 117 118 118 118 118 118 118 118	1,627 150 237 234 186 264 254 308 273 195 110
Nova Scotia	92 152 176 171 220 244 218 238 238 262 202	2,220 193 233 257 271 242 319 390 335 185 200 140
Prince Edward Island	5 4 4 6 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	462 555 623 733 631 839 831 831 831 831 831 831 831 831 831 831
Newfound- land	25 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	467 64 64 64 64 77 88 88 74 74 70 70 70
1	Transfers In: April. May. June. July. August. September. October. November. January. February.	Transfers Out: April. May. June. July. August. September. October. November. January. February. March. Total.

· Difference of 60 accounts in transit between provinces

TABLE 31

(Old Age Security Division)

STATISTICS ON OLD AGE SECURITY

	A	В	. C.	D	E	P	Đ
Province	No. of pensioners in pay March 31, 1952 as result of direct application	No. of pensioners in pay March 31, 1952 transferred from Old Age Pensions	Total Number of pensioners in pay March 31, 1952 (A plus B)	Net Payment for March, 1952 only	Total Net payment for months of January, February, March, 1952	No. of deaths reported in March, 1952	Deferred applications for January and February as of March 31, 1952 (Note 1)
				so	00		
Newfoundland	2,449		14,177			64	43
Prince Edward Island	3,193		6,338			28	99
Nova Scotia.	13,901		34,832		124,	262	131
New Brunswick	7,754		24,540		335,	236	38
Quebec	64,317		139,954		579,	874	746
	147,878	91,047	238,925	9,700,680	28, 194, 920	1,930	481
Manitoba	20,013		37,826		157,	208	172
Saskatchewan	19,697		37, 153		399	178	230
Alberta	18,391		36,637		333,	225	186
British Columbia	39,066		72,225		543	285	286
Yukon and Northwest Territories	290	116	406			0.0	10
Total	336,949	306,064	643,013	26,032,800	76,066,834	4,325	2,389

Nore 1-Column G refers to the number of applications submitted for January and February payment which were not approved by the end of March, 1952.

Table 32 (Old Age Pensions Division)

FEDERAL PAYMENTS OF OLD AGE PENSIONS UNDER THE OLD AGE PENSIONS ACT, BY PROVINCES

FISCAL YEAR 1951-52

Province		for fisca		Federal Pa since ince of A	eption
	7	\$	cts.	8	cts.
Alberta			331 49	49,503	,609 1
British Columbia		8,080	866 54	75,602	
Manitoba New Brunswick		4,595.	957 43 006 72	57,451 41,420	
Newfoundland		3,094,	762 74		283 2
Nova Scotia		5,030,	880 59	53,632	
Ontario Prince Edward Island			334 41 143 45	276,581	,983 49
Quebec				185,223	
Saskatchewan		4,515,	748 41	55,942	
Northwest Territories			955 77 147 37		158 18
Yukon		24,	141 91	80	,655 58
Total		77,204,	272 44	811,211	333 41

Table 33 (Old Age Pensions Division)

FEDERAL PAYMENTS IN RESPECT OF BLINDNESS UNDER THE OLD AGE PENSIONS ACT, BY PROVINCES

FISCAL YEAR 1951-52

Province	Federal Payments for fiscal year 1951-52	Federal Payments since amendment to O.A.P. Act
	\$ cts.	\$ cts.
Alberta	129,609 10	1,013,741 42
British Columbia	176,923 77 157,412 27	1,407,645 50 1,355,850 9
New Brunswick	285,471 66	2,711,019 6
Newfoundland	100,664 50	239,063 5
Nova Scotia	267,014 49 651,182 78	2,371,242 00 5,848,836 7
Prince Edward Island	31,893 76	332,532 89
Quebec	1,066,635 18	9,402,551 72
Saskatchewan	133,945 15 460 00	1,241,101 61 2,640 00
Yukon	540 00	1,500 00
Total	3,001,752 66	25,927,726 07

Table 34 (Old Age Pensions Division)

NUMBER OF OLD AGE PENSIONERS, AVERAGE MONTHLY PENSION, AND PERCENTAGE OF PENSIONERS TO POPULATION OVER 70 YEARS OF AGE, BY PROVINCES, AS AT DECEMBER 31, 1951

Province	Number of Pensioners	Average Monthly Pension	*Percentage of pensioners to population over 70 years of age
Alberta. British Columbia Manitoba New Brunswick Newfoundland Nova Scotia Ontario Prince Edward Island Quebec Saskatchewan Northwest Territories Yukon. Canada	18,408 33,060 17,906 16,825 11,925 20,808 93,175 3,226 75,541 17,844 22 85	\$ cts. 37 53 36 75 38 16 36 58 38 02 35 64 37 73 34 92 37 68 37 48 38 69 38 75	48.57 46.17 45.91 72.21 86.41 59.28 37.26 52.03 54.58 45.17 12.02 25.91

^{*} Percentages based on the estimated population at June 1, 1950 (Dominion Bureau of Statistics) except Yukon Territory and Northwest Territories which are based on 1941 Census.

Table 35 (Old Age Pensions Division)

NUMBER OF BLIND PENSIONERS AND AVERAGE MONTHLY PENSION, BY PROVINCES, AS AT DECEMBER 31, 1951

Province	Number of Pensioners	Average Monthly Pension
Alberta	507	38.50
British Columbia	684	38.07
Manitoba	584	39.14
New Brunswick	1,082	39.03
Newfoundland	385	39.33
Nova Scotia	1,028	38.39
Ontario	2,491	38.71
Prince Edward Island	125	38.15
Quebec	3,948	39.06
Saskatchewan	498	38.88
Northwest Territories	1	40.00
Yukon	2	40.00
Total	11,335	

Table 36 (Old Age Pensions Division)

NUMBER OF RECIPIENTS, AVERAGE MONTHLY ASSISTANCE AND TOTAL FEDERAL PAYMENTS, UNDER THE OLD AGE ASSISTANCE ACT, BY PROVINCES AS AT MARCH 31, 1952

Province	Number of Recipients	Average Monthly Assistance	Federal Payments to March 31, 1952
		\$ cts.	\$ ets.
Alberta	2,954	37 36	144.051 36
British Columbia	4,134	38 28	262,668 27
Manitoba	1,239	38 45	106,689 51
New Brunswick	3,237	36 91	165,637 56
Newfoundland	2,271	34 09	95,673 45
Ontario	12,697	37 28	672,512 10
Prince Edward Island	305	21 72	6,532 45
Quebec	12,267	38 61	690,081 24
Šaskatchewan	2,497	36 93	133,392 55
Total	41,601		2,277,238 49

Table 37 (Old Age Pensions Division)

NUMBER OF RECIPIENTS, AVERAGE MONTHLY ALLOWANCE, AND TOTAL FEDERAL PAYMENT UNDER THE BLIND PERSONS ACT, BY PROVINCES AS AT MARCH 31, 1952

Province	Number of Recipients	Average Monthly Allowance	Federal Payments to March 31 1952
		\$ ets.	\$ cts.
Alberta	376	38 89	33,766 59
British Columbia	426	39 25	37,827 17
Manitoba	401	39 37	35,948 87
New Brunswick	783	39 25	69,185 98
Newfoundland	321	39 26	28,237 49
Nova Scotia	734	38 69	64,199 33
Ontario	1,604	39 20	142,984 41
Prince Edward Island	75	38 10	6,460 17
Quebec	3,013	39 48	271,902 08
askatchewan	343	39 25	30,667 15
Northwest Territories	1	40 00	90 00
Yukon Territory	2	40 00	180 00
Total	8,079		721,449 24

(Physical Fitness Division) TABLE 38

SUMMARY OF AMOUNTS AVAILABLE FOR AND PAID TO PROVINCES UNDER THE NATIONAL PHYSICAL FITNESS ACT

Total	Payments 1944-52	\$ cts.	12,395 74 80,442 76 32,595 42	(a) 148, 126 50 139, 764 90 120, 345 26 120, 345 26 128, 035 00 (a) 936 00	711,812 79
	1951-52	\$ cts.	1,858 50 9,260 69 8,412 32	(1) 74,063 25 (1) 9,573 45 17,520 75 15,567 75 15,993 00	152,249 71
	1950-51	\$ cts.	1,858 50 10,415 36 6,771 84	74,063 25 8,250 97 17,520 75 15,567 75 15,993 00 234 00	150,675 42
(a)	1949-50	\$ cts.	1,858 50 11,426 92 8,943 75	7,237 93 17,520 75 16,463 71 15,993 00 234 00	79,678 56
Fiscal Year	1948-49	\$ cts.	4, 184 75 14, 001 98 6, 280 65	5, 997 84 17, 520 75 14, 671 79 15, 993 00 234 00	78,884 76
Amount Paid in Fiscal Year (a,	1947-48	\$ cts.	8,685 40 2,186 86	7,933 66 35,091 50 19,488 12 16,015 75 234 00	89,635 29
An	1946-47	\$ cts.	2,635 49 12,486 48	7, 484 92 17, 545 75 15, 515 61 32, 031 50	87,699 75
	1945-46	\$ cts.	6,747 50	2, 692, 44 17, 044, 65 23, 070, 53	49, 555 12
	1944-45	\$ cts.	7,418 43	16,015 75	23,434 18
Amount of	Grant Available Annually (b)	\$ cts.	1,858 50 11,301 75 8,943 75 65 151 00	74,063,25 14,269,50 17,520,75 15,567,75 15,993,00 234,00 96,75	
	1		Prince Edward Island	Ontario Manitoba. Saskatchewan. Alberta British Columbia. Northwest Territories	Totals

The amount paid to the province in any one fiscal year does not necessarily coincide with the amount available to it in that year, as payments in respect of (a)

previous years may be included.

Amounts were originally calculated on a per capita basis of distribution to nine provinces. In 1947 they were recalculated to include the Northwest Territories and Yukon. The figures given are the recalculated amounts.

On entry of Newfoundland into Confederation in 1949, the annual federal grant was increased in order to make provision for the new province. (0)

335£

These provinces do not participate at the present time. Payment for 1950-51 claim. Claim for 1951-52 not yet received.

TABLE 39

(Physical Fitness Division)

SUMMARY OF ALLOTMENTS AND EXPENDITURES PHYSICAL FITNESS DIVISION

FOR THE FISCAL YEAR 1951-52

Administration Balance from fiscal year 1950–51 Parliamentary Appropriations 1951–52		\$ cts. 42,148 15 68,240 00
		110,388 15
Expenditures— Total Salaries Professional and Special Services. Travelling Expenses—Staff. Freight, Express and Cartage. Postage. Telephones and Telegrams. Printing of Educational, Informational and Other Publications. Educational and Informational Material Other than Publications. Office Stationery, Supplies and Equipment. Travelling Expenses—Council Members and Others. Sundries.	\$ ets. 24,126 76 3,135 00 3,667 84 634 42 95 34 1,130 59 29,741 82 4,412 83 2,817 19 5,918 83 1,042 77	76,723 39
Balance at end of fiscal year 1951-52		33,664 76
ASSISTANCE TO PROVINCES Balance from fiscal year 1950–51		175,201 10 82,214 00 257,415 10
Expenditures— Prince Edward Island. Nova Scotia. New Brunswick. Ontario. Manitoba. Saskatchewan. Alberta. British Columbia. Northwest Territories.	\$ cts. 1,858 50 9,260 69 8,412 32 74,063 25*† 9,573 45*† 17,520 75 15,567 75 15,993 00 †	152,249 71
Balance at end of fiscal year 1951–52		105,165 39

^{*} This constitutes a late payment for the year 1950–51. † The claim for the fiscal year 1951–52 has not yet been received from this province. $Special\ Note$: These figures are not final.

(Physical Fitness Division) TABLE 40

ASSISTANCE TO PROVINCES AND PROVINCIAL EXPENDITURES UNDER NATIONAL PHYSICAL FITNESS ACT, 1951-52

6	Provincial Department Responsible	Date of Expiration	Tor	TOTAL EXPENDITURE	RE	Pr	PER CAPITA (3)	1)
FROVINCE	for Administration	Agreement	Provincial	Federal	Total	Province Federal	Federal	Total
			\$ cts.	\$ cts.	\$ cts.			
Prince Edward Island	Dept. of Education, Charlottetown	March,	673	828	531	.1544	.0195	.1739
Nova Scotia		31 March, 1953 31 March, 1953	22, 149 22(4)	9,043 74(*) 8,412 32	30, 561 54	.0484	.0156	.0813
Ontario	Dept. of Education, Toronto	March,	587	63	650	.1031	.0195	.1227
Manitoba	Dept. of Health and Fublic Welfare, Winnipeg	31 March, 1952 (1)	63	12	765	.0187	.0180	.0367
Saskatchewan	Dept. of Education, Regina	953	38,307 75	17,520 75	55,828 50	.0428	-0195	.0623
Alberta	Dept. of Education, Calgary	31 March, 1952 (1)	53	56	660	.0534	-0195	.0730
British Columbia	Dept. of Education, Vancouver	31 March, 1952 (1)	47	99	471	.1412	-0195	.1608
Northwest Territories	Dept. of Resources and Development, Ottawa	31 March, 1953	23,003 67	234 00(7)	23, 237 67	1.9125	-0195	1.9320
	Development, Cutawa		3		707		0716.1	_

NOTES:

EE

Renewal of provincial agreements for the period 1 April, 1952 to 31 March, 1953 in process.

As from the commencement of the term of the current agreement, the provincial Department responsible for administration in the province of Nova Scotia will be the Department of Education.

Based on 1941 census figures on which payments for 1951–52 were based.

Includes provincial expenditures not shareable under the terms of the National Physical Fitness Act.

Estimated payments in respect of Nova Scotia for current financial year. A total of \$9,260.69 was actually paid, including claims in respect of the previous

financial year.

Late payment for 1950-51—payment for 1951-52 not included. Estimated claim for 1951-52. Actual claim not yet received. 555 55

Table 41 (Expenditures 1951–52)

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

(Including Administration, Construction or Acquisition of Buildings or Equipment, Grants, etc.)

HEALTH BRANCH:	\$	cts.	\$	cts.	\$ cts.
General Administration			104,20	0 42	
General Health Services					
Administration of the Food and Drugs Act	802,041	44			
Administration of the Proprietary or Patent	002,04	1 11			
Medicines Act	23,595	17			
Administration of the Opium and Narcotic	,	-			
Drugs Act	150,133	61			
Administration of the Quarantine and					
Leprosy Acts	293,617	7 01			
Laboratory of Hygiene	406,613				
Immigration Medical Services	1,275,370	6 02			
Child and Maternal Health	76,973	3 34			
Public Health Engineering	140,011	75			
Sick Mariners Medical Services	564,009	9 02			
Industrial Health	180,176	3 75			
Civil Service Health	240,223	3 23			
Nutrition	116,03	6 04			
Venereal Disease Control	26,688	8 25			
Health Insurance Studies and Administra-	000000				
tion of General Health Grants	64,80				
Dental Health	38,798				
Hospital Design and Consulting Service	19,57				
Mental Health	53,46				
Blindness Control	31,43				
Epidemiology	37,33				
Civil Aviation Medicine	20,520				
Indian and Eskimo Health Services	11,816,490	0 73			
m-+-1		-	10 077 01	0 01	
Total			16,377,91	9 01	

TABLE 41 (ctd)

	\$	cts.	\$	cts.	\$	cts.
Carried Forward			16,482,	120 03		
GRANTS TO PROVINCES						
Health Survey Grant	73.9	13 81				
Hospital Construction Grant	9,166,4					
General Public Health Grant	3,604,6					
Tuberculosis Control Grant	4,045,5					
Mental Health Grant	3,724,4					
Venereal Disease Control Grant		89 75				
Crippled Children Grant		19 27				
Professional Training Grant	521,3	375 66				
Public Health Research Grant		546 57				
Cancer Control Grant	2,042,0	91 68				
Total			24,322,	497 17		
GRANTS TO NON-GOVERNMENTAL AGENCIES						
Grant to Institutions Assisting Sailors	2,6	300 00				
Canadian Mental Health Association	10,0	00 00				
Health League of Canada		00 00				
Canadian Public Health Association	5,0	00 00				
Canadian National Institute for the Blind	45,0	00 00				
L'Association Canadienne Française des						
Aveugles	6,0	00 00				
L'Institut Nazareth de Montreal		050 00				
Montreal Association for the Blind		050 00				
Canadian Tuberculosis Association	20,2	250 00				
Victorian Order of Nurses		100 00				
St. John Ambulance Association	10,0	00 00				
Canadian Red Cross		00 00				
Canadian Paraplegic Association	15,0	000 00				
Total			155	,050 00		
Total Health Branch					40,959,	667 20

TABLE 41(ctd)

					s	cts.	s	ets.	s	cts.
Carried F	annond.								40 959	667 20
Carried F	orward								10,000,	00. 20
WELFARE	Branch									
	stration:									
Famil Old A Old A	ly Allowane age Security age Pension	s and Pensie	ons to the B	1, lind	858,7 498,1 91,6	46 02				
	Total						2,556,6	27 55		
			s						(b)	
GRANTS	TO PROVIN	CES								
Old A	ge Pension	8		77,	204,2	72 44				
Pensi	ons to the l	Blind		3,	001,7	52 66				
					277,2	38 49				
					721,4					
Natio	onal Physica	al Fitness		(a)	152,2	49 71				
	Total						83,356,9	62 54		
GRANTS	TO NON-G	OVERNMENT	AL AGENCIE	s						
Cana	dian Welfar	re Council			16.0	00 00				
Assis	tance to Sch	ools of Socia	al Work			00 00				
	Total						116,0	00 00		
Civil	Defence								872	,005 73
Total I	Department	of Nation	AL HEALTH	AND WEI	LFARE			4	198,830	,634 35
(a) 7	Γhese expen \$150,454.00	ditures wer was transfe	e made from rred during	the Na	tional	Physic	eal Fitnes	s Trust	Fund t	o which
(b) (Old Age Sec	urity paym	ents totalled	1				8	76,066	,834.63
	Less an	mount recove m special to	ered from the	e Depart	ment	of Nati	onal Rev	enue	26,397	,979.31
		Net !	Expenditure					8	49,668	,855 32
(c) I	Includes gra	atuities to fa	amilies of de	ceased e	mploy	ees.				

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

MINISTER

HONOURABLE PAUL MARTIN, Q.C., M.P., LL.M., LL.D.

DEPUTY MINISTER OF NATIONAL HEALTH AND WELFARE (HEALTH)
G. D. W. CAMERON, M.D., C.M., D.P.H., LL.D.

DEPUTY MINISTER OF NATIONAL HEALTH AND WELFARE (WELFARE)
G. F. DAVIDSON, B.A., M.A., Ph.D.

HEALTH BRANCH

FOOD AND DRUG DIVISIONS—Director, C. A. Morrell, M.A., Ph.D., F.R.S.C. Laboratory Services, Chief, L. I. Pugsley, B.A., M.Sc., Ph.D. Inspection Services, Chief, W. A. Crandall, B.A., M.Sc. Proprietary or Patent Medicines, Chief, Paul Soucy, Phm.B.

HEALTH INSURANCE STUDIES DIRECTORATE—Director, F. W. Jackson, M.D., D.P.H.

Assistant Directors, G. E. Wride, M.D., D.P.H.: Emile Martel, M.D., D.P.H.

HEALTH SERVICES DIRECTORATE—Director, H. A. Ansley, M.D., D.P.H. Assistant, B. D. B. Layton, M.D., M.P.H.

Assistant Director, F. S. Parney, M.D.

Blindness Control Division, Chief, J. H. Grove, M.D.

Child and Maternal Health Division, Chief, Ernest Couture, M.D., C.M. Civil Aviation Medicine Division, Chief, W. A. Prowse, M.D., C.M., D.P.H.

Civil Service Health Division, Chief, R. G. Ratz, M.B.

Dental Health Division, Chief, H. K. Brown, D.D.S., D.D.P.H.

Epidemiology Division, Chief, A. F. W. Peart, M.B.E., M.D., C.M., D.P.H. Hospital Design Division, Chief, H. G. Hughes, B.Arch., A.R.I.B.A., M.R.A.I.C.

Industrial Health Division, Chief, K. C. Charron, M.D.

Industrial Health Laboratory, Chief, K. Kay, M.A., Ph.D. Laboratory of Hygiene, Chief, J. Gibbard, B.S.A., S.M., F.R.S.C. Mental Health Division, Chief, C. A. Roberts, M.D., C.M., L.M.C.C.

Narcotic Control Division, Chief, K. C. Hossick.

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PHYSICAL FITNESS DIVISION, Assistant Director, Doris W. Plewes, M.A., B.Paed., Ed.D.

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Deputy Co-ordinator and Director of Operations and Training, J. C. Jefferson, C.B., D.S.O. (and Bar), E.D.

Chief Administrative Officer, M. P. Cawdron, M.A., B.Sc.

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Legal Division, Legal Adviser, R. E. Curran, Q.C., B.A., LL.B.
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Research Division, Chief, J. W. Willard, M.A., M.P.A., A.M.

Translation Office, Chief, G. A. Sauvé. Chief Treasury Officer, T. F. Phillips.

DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS

ADMINISTRATIVE OFFICES

OTTAWA-Jackson Building, Bank and Slater Streets

FAMILY ALLOWANCES AND OLD AGE SECURITY REGIONAL OFFICES

ST. JOHN'S. Nfld	29 Buckmasters' Field
CHARLOTTETOWN, P.E.I	59 Queen Street
HALIFAX, N.S	Industrial Building
FREDERICTON, N.B	Federal Building
QUEBEC, Que	51 Boulevard des Capucins
TORONTO, Ont	122 Front Street West
WINNIPEG, Man	Lindsay Building
REGINA, Sask	Saskatchewan Motors Building, Broad Street
EDMONTON, Alta	

FOOD AND DRUG LABORATORIES

OTTAWA, Ont.	35 John Street
HALIFAX, N.S.	Dominion Public Building, (P.O. Box 605)
MONTREAL, Que	379 Common Street
TORONTO, Ont	65 Victoria Street
WINNIPEG, Man	Aragon Building, 244 Smith Street
VANCOUVER, B.C	Federal Building, 325 Granville Street.

INDIAN HEALTH SERVICES

Hospitals

PRINCE RUPERT, B.C Miller Bay Indian Hospital NANAIMO, B.C Nanaimo Indian Hospital
SARDIS, B.C Coqualeetza Indian Hospital
†CARDSTON, Alta Blood Indian Hospital
EDMONTON, Alta Charles Camsell Indian Hospital
GLEICHEN, Alta Blackfoot Indian Hospital
HOBBEMA, Alta Hobbema Indian Hospital
FORT QU'APPELLE, Sask Fort Qu'Appelle Indian Hospital
NORTH BATTLEFORD, Sask North Battleford Indian Hospital
HODGSON, Man Fisher River Indian Hospital
PINE FALLS, Man Fort Alexander Indian Hospital
NORWAY HOUSE, Man Norway House Indian Hospital
*BRANDON, Man Brandon Indian Hospital
*SELKIRK, Man Dynevor Indian Hospital
*THE PAS, Man Clearwater Indian Hospital
MOOSE FACTORY, Ont Moose Factory Indian Hospital
OHSKEWEN, Ont Lady Willingdon Indian Hospital
SIOUX LOOKOUT, Ont Sioux Lookout Indian Hospital

Nursing Stations

CAPE DORSET, N.W.T. COPPERMINE, N.W.T. FORT McPHERSON, N.W.T. FORT NORMAN, N.W.T. BROCKET, Alta. (Peigan) DRIFTPILE, Alta. MORLEY, Alta. (Stony) SADDLE LAKE, Alta. LAC LA RONGE, Sask. LEASK, Sask. CROSS LAKE, Man. GOD'S LAKE, Man. GYPSUMVILLE, Man. (Little Saskat- RUPERT'S HOUSE, Que. chewan) ISLAND LAKE, Man.

NELSON HOUSE, Man.

AKLAVIK, N.W.T.

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- † Departmental hospitals staffed by religious orders on stipend.
- * Departmental Sanatoria staffed and operated by the Sanatorium Board of Manitoba, with reimbursement on a per diem basis.

Health Centres

CORAL HARBOUR, N.W.T. FORT RAE, N.W.T. FORT RESOLUTION, N.W.T. FORT SIMPSON, N.W.T. PANGNIRTUNG, N.W.T. WHITEHORSE, Y.T. Carmacks (seasonal) Teslin (seasonal) ALERT BAY, B.C. BRENTWOOD, B.C. CEEPEECEE, B.C. DUNCAN, B.C. FORT ST. JAMES, B.C. GREENVILLE, B.C. HAZELTON, B.C. KAMLOOPS, B.C. KINCOLITH, B.C. LILLOOET, B.C. MERRITT, B.C. NEW WESTMINSTER, B.C. PORT EDWARD, B.C.

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Health Centres-Conc.

AMOS, Que.

Manowan (seasonal)

Mictassini (seasonal)

Mistassini (seasonal)
Obedjiwan (seasonal)
Waswanipi (seasonal)

CAUGHNAWAGA, Que. LORRETTEVILLE, Que.

MANIWAKI, Que.

Rapids Lake (seasonal)

NOTRE DAME DU NORD, Que.

POINTE BLEUE, Que.
RESTIGOUCHE, Que.
SEVEN ISLANDS, Que.
KINGSCLEAR, N.B.
ROGERSVILLE, N.B.
SHUBENACADIE, N.S.

SYDNEY, N.S.

LENNOX ISLAND, P.E.I.

INDUSTRIAL HEALTH LABORATORY

OTTAWA-200 Kent Street

LABORATORIES OF HYGIENE

OTTAWA-45 Spencer Street

KAMLOOPS B.C.

PUBLIC HEALTH ENGINEERING DISTRICT OFFICES

IMMIGRATION MEDICAL SERVICE OFFICES

Canada

Overseas

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BELFAST, Northern Ireland 65 Chichester Street
GLASGOW, Scotland 18 Woodlands Terrace, C.3.
LIVERPOOL, England 34 Moorfields, Lancs. 1.
Continent—
BRUSSELS, Belgium 230 Rue Royale
PARIS, France 38 Avenue de l'Opera
ROME, Italy Via Nemorense, 90
THE HAGUE, Holland 23 Alexanderstraat
COPENHAGEN, Denmark Vestagervej 5
STOCKHOLM, Sweden Smala Grand 5
LINZ, Austria Canadian Government Immigration Mission,
Promenade, 24
KARLSRUHE, Germany (U.S.
Zone) Canadian Government Immigration Mission,
Lutz Hotel Building, 94 Krieg Strasse
BREMEN, Germany (British
Zone) Canadian Government Immigration Mission,
Bremer Uberseeheim, Niedersacsendamm,
Bremen-Neustadt
HANOVER, Germany (British
Zone) 10 Kirchroederstrasse.

SICK MARINERS CLINICS AND HOSPITALS

HALIFAX, N.S	Immigration Building, Pier 21
SYDNEY, N.S	Marine Hospital
LUNENBURG, N.S	Marine Hospital
SAINT JOHN, N.B	Pier 9
QUEBEC, Que	Louise Basin
MONTREAL, Que	379 Common Street
VANCOUVER, B.C	Immigration Building

QUARANTINE STATIONS AND SUB-STATIONS

HALIFAX, N.S	Rockhead Hospital
SAINT JOHN, N.B	Quarantine Hospital
QUEBEC, Que	Louise Basin and Quarantine Hospital, Quebec
	West
MONTREAL, Que	379 Common Street and Dorval Airport
VANCOUVER, B.C	Immigration Building
VICTORIA, B.C	William Head, B.C.
GANDER, Nfld	Gander Airport
THREE RIVERS, Que SOREL, Que RIMOUSKI, Que PORT ALFRED, Que	Sub-stations under direction of Quarantine Officer in Charge at Quebec. There is a Quarantine Officer appointed in each port.

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