

## **Annual report of the Department of National Health and Welfare [Canada].**

### **Contributors**

Canada. Department of National Health and Welfare.

### **Publication/Creation**

Ottawa : [Govt. Printer], [1966]

### **Persistent URL**

<https://wellcomecollection.org/works/w7s2cdus>

### **License and attribution**

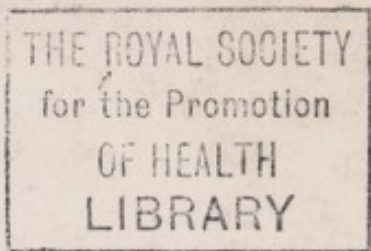
This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>

31624



# ANNUAL REPORT

DEPARTMENT  
OF NATIONAL HEALTH  
AND WELFARE

FOR THE FISCAL YEAR  
ENDED MARCH 31,  
1966

RBA/69 ✓





22501400123



THE DEPARTMENT OF NATIONAL HEALTH AND WELFARE

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, 1966.

# ANNUAL REPORT

for the fiscal year ended March 31, 1966

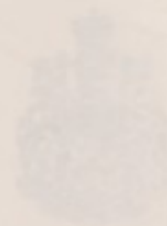
Minister of National Health and Welfare



OTTAWA

Queen's Printer and Controller of Stationery  
Ottawa, 1966

Can. Pub. Serv. No. 11-71988



THE DEPARTMENT OF NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

for the fiscal year ended March 31, 1966

WELLCOME INSTITUTE LIBRARY	
Call	wellcome
Call	Ann Rip
No.	WA28
	.GC2
	C21
	1966



ROGER DUHAMEL, F.R.S.C.  
Queen's Printer and Controller of Stationery  
Ottawa, 1967

Cat. No.: H1-3/1966



THE TWO-LEVEL DIRECTORATE.....	1
--------------------------------	---

## HEALTH SERVICES BRANCH

Introduction.....	17
Health Education.....	18
Health Insurance.....	20
Interaction of Health.....	22

His Excellency the Right Honourable Roland Michener, 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, 1966.


Respectfully submitted,

ALLAN J. MacEACHEN

Minister of National Health and Welfare

MEDICAL SERVICES.....	23
-----------------------	----

DANISH COUNCIL OF HEALTH.....	100
-------------------------------	-----



Digitized by the Internet Archive  
in 2019 with funding from  
Wellcome Library

<https://archive.org/details/b31408175>

# CONTENTS

	Page
FOOD AND DRUG DIRECTORATE .....	3
HEALTH SERVICES BRANCH	
Introduction .....	17
Health Education .....	18
Health Insurance .....	20
International Health .....	22
National Health Grants .....	23
Research Development .....	28
Special Projects .....	33
Smoking and Health .....	35
Aerospace Medicine.....	36
Child and Maternal Health .....	37
Dental Health.....	40
Emergency Health Services .....	42
Epidemiology.....	45
Health Facilities Design.....	48
Laboratory of Hygiene.....	50
Medical Rehabilitation.....	58
Mental Health .....	63
Nursing Advisory Service.....	65
Nutrition.....	66
Occupational Health.....	69
Public Health Engineering .....	74
Radiation Protection .....	78
MEDICAL SERVICES.....	83
DOMINION COUNCIL OF HEALTH.....	108



## WELFARE BRANCH

Canada Pension Plan .....	109
Old Age Security .....	113
Family Allowances .....	117
Family Assistance .....	120
Youth Allowances .....	121
Unemployment Assistance .....	123
Old Age Assistance .....	126
Allowances for Blind Persons .....	126
Allowances for Disabled Persons .....	128
National Welfare Grants .....	130
Emergency Welfare .....	132
International Welfare .....	135
Fitness and Amateur Sport .....	137

## ADMINISTRATION BRANCH

Departmental Secretary .....	152
Information Services .....	152
Legal .....	156
Departmental Library .....	156
Personnel Administration and Organization .....	157
Purchasing and Supply .....	160
Research and Statistics .....	160
 DIRECTORY OF DEPARTMENTAL OFFICERS .....	 177
 DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS .....	 183

# INDEX OF TABLES

Table		Page
1	Payments by Canada under Hospital Insurance and Diagnostic Services Act .....	21
2	Expenditures under the National Health Grants 1965-66.....	26
3	Statement of Payments of General Health and Hospital Construction Grants to Provinces .....	27
4	Summary of Intramural Research Program - 1965-66.....	29
5	Distribution of Research Funds under National Health Grants to Departments of Universities, Hospital, etc., 1965-66 .....	30
6	Distribution of Research Funds under National Health Grants According to Field of Investigation - 1965-66 .....	31
7	Distribution of Research Funds under National Health Grants According to Disease Groups - 1965-66 .....	32
8	Hospital Construction Grant Approvals since 1948 .....	49
9	Trend in Indian Mortality 1960-64 .....	103
10	Sick Mariners Treated, Fiscal Year 1964-65 .....	104
11	Yellow Fever Inoculations .....	105
12	Total Number of Smallpox Vaccinations Given at Ports of Entry .....	106
13	Immigration Medical Service Summary of Activities 1965 .....	107
14	Net Old Age Security Payments - Comparison by Fiscal Years .....	115
15	Comparative Statement of Old Age Security Payments Between Month of March 1965 and Month of March 1966 .....	116
16	Numbers of Children in the Families Receiving Family Allowances in March, 1966 .....	117



17	Comparative Statement of Family Allowances Payments Between Month of March 1965 and Month of March 1966 .....	118
18	Net Family Allowances Payments - Comparison By Fiscal Years .....	119
19	Total Yearly Payments for Each Province and Number of Children and Families in Pay in March 1966 .....	120
20	Comparative Statement of Youth Allowances Payments Between March 1965 and March 1966 .....	122
21	Net Youth Allowances Payments Comparison by Fiscal Years From Beginning of Program .....	122
22	Federal Unemployment Assistance Payments to Provinces .....	124
23	Federal-Provincial Unemployment Assistance Agreements .....	125
24	Federal Payments Towards Assistance to the Aged, Blind and Disabled .....	129
25	Expenditures Under National Welfare Grants Program, by Province, for the Year Ended March 31, 1966....	131
26	Allocations and Grants Under Federal-Provincial Fitness and Amateur Sport Program.....	145
27	Scholarships and Fellowships Awarded to Post-Graduate Students Under Fitness and Amateur Sport Program 1965-66 .....	146
28	Undergraduate Scholarships and Bursaries Awarded Under Fitness and Amateur Sport Program.....	147
29	Research Grants Awarded Under Fitness and Amateur Sport Program 1965-66.....	148
30	Grants Under the Fitness and Amateur Sport Act to Sports Governing Bodies, by Type of Program.....	149
31-32	Grants Under the Fitness and Amateur Sport Act to Sports Governing Bodies, by Type of Program.....	150-151
33	National Film Libraries .....	155



34	Established Full-Time Positions March 31, 1965 and March 31, 1966 .....	158
35	Geographical Distribution of Positions as of March 31, 1966.....	159

To the Honourable Allan J. MacEachan,  
Minister of National Health and Welfare, Ottawa.

Sir:

Several events of national scope were among major developments in the Department during the 1965-66 fiscal year.

In a half a decade, perhaps the most significant development in 1965-66 was implementation of the Canada Pension Plan. The Act establishing the Plan was proclaimed on May 8, 1965 and contributions to the Plan began on January 6, 1966. The Plan will provide working persons and their families with a secure pension when they retire, pensions should they become severely disabled, benefits for their survivors.

Another notable event in the field of social security was the beginning of the program to reduce the Old Age Security payable age from 70 to 65. Under an amendment to the Old Age Security Act, the age at which the pension becomes payable is being reduced from 70 to 65, one year at a time. This will have the effect of reducing the payable age to 65 by January 1970.

A significant national step in the field of human and amateur sports was the granting by the Department of \$100,000 to the Organizing Committee of the First Canadian Winter Games, to be held in Quebec City in February 1967. Sports events will include hockey, skiing, basketball and other activities. These first all-Canadian multi-sport games represent a highly significant event in Canadian amateur sports since, for the first time, teams from all provinces and territories will be competing in a variety of sports.

Efforts of Health Services staff and others in the public health field have been responsible for bringing about a marked decline in the Indian infant mortality rate. The overall efforts of Health Services have tended to improve health among the indigenous population, with a decline also in the Native infant mortality rate.



To the Honourable Allan J. MacEachen,  
Minister of National Health and Welfare, Ottawa.

SIR:

Several events of national scope were among major developments in the Department during the 1965-66 fiscal year.

In a national sense, perhaps the major development in 1965-66 was implementation of the Canada Pension Plan. The Act establishing the Plan was proclaimed on May 5, 1965 and contributions to the Plan began on January 6, 1966. The Plan will provide working persons with three classes of benefits: pensions when they retire, pensions should they become severely disabled; benefits for their survivors.

Another notable event in the field of social security was the beginning of the program to reduce the Old Age Security pensionable age from 70 to 65. Under an amendment to the Old Age Security Act, the age at which the pension becomes payable is being reduced from 70 to 65, one year at a time. This will have the effect of reducing the pensionable age to 65 by January 1970.

A significant national step in the field of fitness and amateur sport was the granting by the Department of \$750,000 to the Organizing Committee of the First Canadian Winter Games, to be held in Quebec City in February 1967. Sports events will include hockey, skiing, basketball and ten other activities. These first all-Canadian multiple games represent a highly significant event in Canadian amateur sports since, for the first time, teams from all provinces and territories will be competing in a variety of sports.

Efforts of Medical Services staff and others in the public health field have been responsible for bringing about a marked decline in the Indian infant mortality rate. The overall efforts of Medical Services have tended to improve health among the indigenous population, with a decline also in the Eskimo infant mortality rate.



The recently-initiated Drug Adverse Reaction Reporting Program is now well advanced and officials feel that it has served the purpose for which it is intended, namely to communicate to persons in the health field information on acute, unusual and chronic reactions to drugs.

Preliminary planning in connection with the Canada Assistance Plan, designed to assist those who will not be adequately cared for through pensions, is completed and the Plan will be functioning in the near future.

As the 1965-66 fiscal year drew to a close, final planning for national medical care services was well advanced and it was expected that this Canadian health program will be in effect some time in the near future.

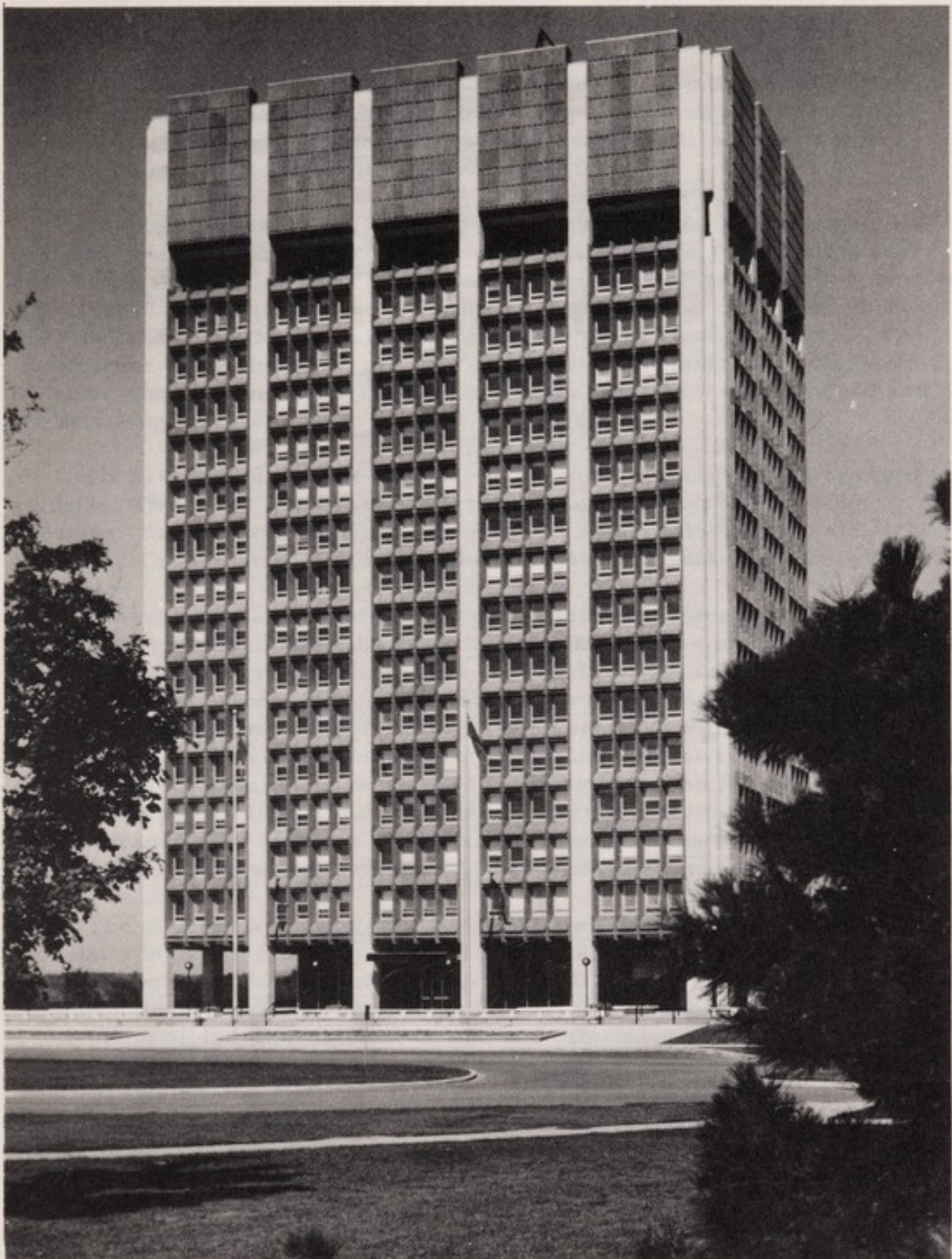
We would be remiss in closing this Letter of Transmittal without a word of appreciation to the devoted service and loyal co-operation we have received from all staff of this Department during 1965-66.

Respectfully submitted,

J. N. CRAWFORD,  
Deputy Minister of National  
Health and Welfare (Health)

JOSEPH W. WILLARD,  
Deputy Minister of National  
Health and Welfare (Welfare).

Ottawa, Canada.



The Brooke Claxton Building, which dominates the government complex of Tunney's Pasture, Ottawa, is the nerve center of the Department of National Health and Welfare. It accomodates nearly 1,000 Headquarters personnel.





## FOOD AND DRUG DIRECTORATE

The Food and Drug Directorate is responsible for the administration and enforcement of three Acts of Parliament: the Food and Drugs Act, the Proprietary or Patent Medicine Act and the Narcotic Control Act.

It is doubtful if any one regulatory agency more intimately touches the daily lives of Canadians, regardless of age: all must eat and all will at some stage of life's journey need some form of medication to restore impaired health or bolster flagging vitality.

Keeping abreast of or, ideally, a step ahead of the everchanging and complex problems arising from the development of new and potent drugs and chemicals and the drastic advances in food technology, calls for constant appraisal of the scope and facilities of the organization. In recent years the Food and Drug Directorate has undergone major reorganization. The Directorate is now headed by the Director-General, assisted by the Deputy Director-General and two Assistant Directors-General - one for Food and one for Drugs.

Six principal divisions each are charged with a major area of responsibility. They are: the newly-created Bureau of Scientific Advisory Services, the Bureau of Operations, Research Laboratories, Administrative Services, Consumer Division, and the Narcotic and Controlled Drug Division.

Because of the widespread use of pesticides in the production of agricultural commodities, the Directorate continued its program to ensure that the amounts of residues of these chemicals do not constitute a health hazard. As dairy products are particularly vulnerable to contamination by pesticides, this group of food products has been carefully investigated. A liaison committee was established to ensure the closest co-operation for the exchange of information between the Directorate and the federal Department of Agriculture on all pesticide matters. A Trade Information Letter, dealing with tolerances for residues of pesticide chemicals was sent to agriculturists and manufacturers and distributors of pesticide chemicals.

The maximum amount of Vitamin D which may be present in a reasonable daily intake of food was reduced from 800 to 400 International Units. At the same time the level of Vitamin D which may be present in drug preparations advertised to the public was restricted to a minimum of 300 and a maximum of 400 International Units per recommended daily dose.

Provision was made for the addition of Vitamin D to milk, skim milk, partly skimmed milk, evaporated milk, evaporated skim milk, milk powder and skim milk powder, margarine and margarine-like products and prepared infant formulae. A time limit was imposed on packagers of bacon to bring their packages in line with requirements of the Food and Drugs Act with respect to deception. Four synthetic food colours were deleted from the list of permissible colours when it was suggested that these colours may not be as harmless as originally considered.

Regulations were passed requiring varying cautionary statements on the labels of drugs containing phenacetin and certain other medicinal ingredients.



A fact-finding mission composed of three senior officers of the Directorate travelled to Europe to study drug control measures in force in the principal drug-exporting countries on that continent.

Extensive use was made of committees specially appointed to conduct studies and advise the Directorate. The principal one of these is the Canadian Drug Advisory Committee which held two meetings. In addition there were a number of ad hoc committees, many of which had representation from the Canadian Drug Advisory Committee. Included were special committees on: 1. The Relationship between Ulcerating Stenosing Lesions of the Small Bowel and the Ingestion of Thiazide and Potassium Chloride in Enteric-Coated Formulation; 2. Drug Sampling; 3. The Use of Parnate, Parstelin and Parstelin S-2 and other Amine Oxidase Inhibitors; 4. The Granting of Compulsory Drug Licences; 5. A Study of Food and Drug Directorate Regulations on Adequate Directions for use of Drugs; 6. A Study of Revision of the Proprietary or Patent Medicine Act; 7. A Study of Regulations on Investigational Drugs; 8. A Study of A. S. A. Poisonings, and 9. A Study of the Existing List of Schedule A Diseases in the Food and Drugs Act. The Directorate is grateful for the support and help provided by the members of these committees.

The Advisory Council of Consumers met twice. This Council was established in 1964 to advise the Minister in matters involving consumer interest in the administration of the Food and Drugs Act and the Proprietary or Patent Medicine Act. Many problems were studied and to date a number of resolutions have been passed or recommendations made. These have sought better packaging for bacon; more effective control of Salmonella contamination in foods and the prevention of colour addition to canned red cherries and other canned fruits and vegetables.

A subcommittee of the Council recommended a comprehensive program to educate consumers on the use and abuse of drugs. This program is being implemented by the Consumer Division.

Members of the Directorate have continued to serve at the international level with agencies of the United Nations. The Deputy Director-General was a member of the Scientific Group on International Drug Monitoring convened by the World Health Organization in Geneva. One scientist assisted with the toxicological evaluation of food additives and pesticide residues as a member of the World Health Organization, while another worked with the Food and Agriculture Organization as a member of that agency's Food Standards Program under the auspices of the Codex Alimentarius Commission. Under the External Aid Program, another member of the Directorate served as adviser to the government of Ghana in the establishment of laboratories in that country for the examination of foods and drugs. Other members of the staff have served on expert committees or on short assignments with the World Health Organization, the Food and Nutrition Board, the American Academy of Pediatrics and similar organizations.

#### Bureau of Scientific Advisory Services

In 1965 the functions of evaluating submissions on investigational new drugs, new drugs, medical devices, cosmetics, pesticides and food additives



were grouped and the responsibility assigned to the newly created Bureau of Scientific Advisory Services.

The Bureau is made up of a Submission Control Unit and four divisions: Medical, Veterinary Medicine, Pharmacological Evaluation and Standards and Additives.

#### Submission Control

This unit is responsible for receipt, distribution and control of submissions for evaluation, and evaluates manufacturing data submitted.

#### Medical Division

The Medical Division continues its functions of evaluation of clinical investigations and of the provision of advisory services. This division is also responsible for the Poison Control Program and for the Adverse Reaction Reporting Program.

#### Veterinary Medicine Division

This division's functions are to provide advisory services on problems concerned with veterinary medicine and the evaluation of submissions on veterinary drugs.

#### Pharmacological Evaluation Division

This division is responsible for pharmacological and toxicological evaluation of submissions and for the provision of advisory services in these areas.

#### Standards and Additives Division

The Standards and Additives Division evaluates submissions on pesticides and food additives and is responsible for the development and maintenance of Food and Drug standards.

#### Programs

In the past year, 104 new drug submissions were received from pharmaceutical manufacturers, and 182 submissions were carried over from the previous year. During the year 72 submissions, including 12 for veterinary drugs, were cleared, one was withdrawn, 24 declared inactive, two consolidated with other new drug submissions and one transferred to the preclinical category.

Forty-five major supplemental submissions were received and 42 were cleared, of which seven were veterinary drugs.

One hundred and thirty-two investigational new drugs were received and 82 carried over from the previous year. Eighty-seven, including seven veterinary drugs, were cleared, 13 withdrawn, one transferred to the new drug category and 113 were carried forward.



Submissions were evaluated and action recommended for 95 pesticides, 82 foods and food additives, 148 packaging materials and 230 miscellaneous items.

In connection with food and drug standards, 136 methods of analysis and methods of sampling and examination were edited, prepared, published and circulated for use in the laboratories and for distribution to industry and to other government agencies.

Poison Control Centres across Canada now number 250 (233 official and 27 non-official centres). All have been supplied with card indices for drugs and household products. Five drug manufacturers supplied toxicity manuals covering their products and several manufacturers of household chemical products supplied similar data for their products for distribution to the centres. An improved reporting form was distributed to all centres.

In February 1966 a Drug Adverse Reaction Reporting Program was initiated on a pilot basis to study the methodology and to develop a reporting network. The program is meant to obtain information about acute, unusual and chronic adverse reactions to drugs; to inform practitioners of the type and incidence of adverse reactions associated with specific drugs or combination of drugs and to advise the Directorate on the evaluation and review of drug labels and professional literature with respect to warnings, contraindications, precautions and adverse effects.

The Drug Adverse Reaction Reporting Program consists of two systems: "Drug Alert" and "Evaluation and Research".

The Drug Alert system warns the Directorate of any unusual or high incidence of adverse reactions associated with a class or brand of drug and establishes priorities for the scientific investigations of specific drug adverse reactions.

The Evaluation and Research system was developed to investigate specific problems identified by the Drug Alert system, using retrospective and prospective techniques. This system will provide the scientific evidence to support decisions of the Directorate on policy and enforcement of the Regulations as well as the data for information and educational programs directed at the professional level. Fourteen university teaching hospitals are under contract with the Directorate to provide services for this system. Response to the program in its first year of operation was good and analysis of the methodology and data procured was initiated.

Through its Research Program, the Bureau of Scientific Advisory Services undertook research into problems associated with the evaluation of drug submissions. Under its Information and Education Program, it published a guide for manufacturers to use when submitting data on investigational new drugs and laid plans for additional guides and brochures.

#### Bureau of Operations

The Bureau of Operations is responsible for all field activities, both laboratory and inspection. The Bureau has two divisions at Ottawa: Field



Programs which carries out inspection and enforcement and co-ordinates all field activities, and the Advertising, Labelling and Registration Division.

In its day-to-day activities related to inspection and enforcement and co-ordination of field activities, the Field Programs Division acted in an advisory capacity to the Interdepartmental Pharmaceutical Board. The Enforcement Unit of the division was involved in the completion of 100 prosecutions with fines totalling \$11,875.

There were 65 seizures of foods and 77 of drugs, involving goods to a value of \$69,290.

The Advertising, Labelling and Registration Division reviewed 3,677 labels, inserts and circulars for drugs and 4,910 labels for food; 18,820 advertisements for drugs and 21,908 for food; 6,873 radio and television commercials for drugs and 22,642 for food, and granted 573 interviews.

Labels of food treated with gamma radiation were required to carry a statement to that effect and steps were taken to require that foods treated with chemical sprout inhibitors should be so labelled.

There were 209 applications for new registration under the Proprietary or Patent Medicine Act of which 107 were accepted. Registrations and licences issued totalled 2,853. Of 663 drug trademarks reviewed, 69 were found unacceptable.

There are at present 73 drug companies, situated in 12 countries, licensed to manufacture drugs listed in Schedules C and D (mainly injectable drugs) to the Food and Drugs Act.

#### Research Laboratories

The Research Laboratories carry out research on foods and drugs and develop analytical methods to enable the Directorate to carry out its responsibilities under the Food and Drugs Act.

During the year the work of Research Laboratories resulted in the publication of more than 50 scientific papers and staff members wrote comprehensive reviews and contributed chapters to scientific textbooks. They also took part in collaborative studies of food and drug methods sponsored by organizations such as the Association of Official Analytical Chemists.

Reorganization of Research Laboratories into five major divisions was completed. Each of the divisions - Food, Microbiology, Nutrition, Pharmaceutical Chemistry and Pharmacology and Endocrinology - is composed of several sections and is headed by an internationally recognized expert in the field. In addition, there are three research services - Biometrics, Experimental Animals and Instrumentation Sections.

Attesting to the universal recognition of the scientific work of the Directorate, members of the Research Laboratories were asked to serve on numerous international committees and organizations, and scientists



continued to come from other countries in search of training and experience in various specialized aspects of Food and Drug Research. Chile, Thailand and Panama were among the countries sending experts for specialized training. In addition, three National Research Council Postdoctoral Fellows and one UNICEF Fellow carried out research in the laboratories.

## Food Division

In the Food Composition section, a research program on the composition of meats, meat products, fats, oils, juices and drinks was established. Methods were developed for the enforcement of proposed regulations for meats and juices. New methods were also developed to allow the analyst in the regional laboratories to analyse for several of the many intentional food additives simultaneously. These include antioxidants, emulsifiers, stabilizers and hexitols in dietetic foods.

In the Food Additive section, studies were made to determine the applicability of the division's aflatoxin method to foods other than peanuts. Fungicides were screened with a view to finding a substance which might be used to prevent the growth on foods of the mould *Aspergillus flavus*, which produces aflatoxin. Toxic metabolites of the aflatoxins were studied. Work was done on development of a method which will measure hydrocarbons that may be present in extremely small quantities in smoked foods and liquid smoke and on methods for the detection of chemicals produced in foods during processing (chick edema factor in fats and tyramines in cheeses and wines) or by infestation of insects, rodents, fungi and micro-organism.

An extensive and well-established program in the Pesticide section was continued. New and more sophisticated methods were developed and extended to cover new pesticides and additional foods. Metabolism studies of these compounds in plants and animals were continued. Establishment of colonies of insects resistant to certain pesticides was begun. Enzyme systems of the resistant strains will be studied and compared with those from susceptible strains.

## Microbiology

Studies aimed at understanding the action of gamma irradiation upon micro-organism present in foods have made contributions to knowledge in the effect of irradiation upon the nuclear material of bacteria, mutation rates, factors related to induced resistance to irradiation, protein changes and mutations of spore-forming pathogens.

Fungi (molds) that are common in foods, and pathogenic fungi that may be present on foods, are being examined by sensitive methods for their potentiality to produce toxins such as the aflatoxins.

A new toxin, probably produced by staphylococci, but differing from enterotoxins A, B or C, was isolated from powdered malted milk that caused extensive severe food poisoning. Type A enterotoxin from staphylococci was purified with a view to determining its amino acid composition.



Fluorescent antibodies of high specificity were prepared for certain strains of Clostridium botulinum, with a view to more rapid detection in foods.

Surveys of packaged sliced meats failed to detect Clostridium botulinum among several hundred specimens. Four of 200 specimens of fish fillets contained this organism: two of type E, one each of types A and B.

A new principle was elucidated with the expectation it may lead to new methods for isolation of food-borne pathogens in foods contaminated with fecal bacteria. An improved method was developed for recovery of Salmonella from contaminated meats, such as hamburger.

#### Nutrition

Plasma amino acid levels after a test meal were used to determine the limiting amino acid in diets. The supplementation of practical, low protein diets with the limiting amino acids indicated that such supplementation of foods is difficult and unwarranted. Differences in protein quality were detected even under conditions of caloric deficiency. Equations for predicting protein values of such diets must take protein quality into account. The extraction of fish with dichloroethane not only reduced the availability of certain amino acids but also produced a toxic derivative of choline.

A new method for the assay of vitamin D by gas-liquid chromatography was developed and applied to biological materials. The biological potency of vitamin A derivatives found in pharmaceuticals was found to be almost zero and their metabolism was quite different than that of vitamin A. In studies with rabbits the hypercholesterolemic effect of egg yolk was attributed solely to its cholesterol content and not to any other lipid component. Cambra oil (rapeseed oil with almost no erucic acid) appeared to be nutritionally similar to olive oil for the rat.

Sustained-release iron preparations were found to be unsatisfactory in both sustained release characteristics and in availability. Pyridoxine and calcium pantothenate were absorbed and utilized as efficiently when given at 4-day intervals as when given daily.

#### Pharmaceutical Chemistry

In the Analytical Chemistry section methods were established for the separation, identification and assay of anticoagulant drugs and sedatives both in the pure state and as pharmaceutical formulations. Selective techniques were developed for the quantitative determination of single dosage forms of sympathomimetic amines and hypnotics and inter-tablet variation investigated for the purpose of improving existing product specifications. It was found that uniformity of drug dosage decreased progressively as the inactive-active ingredient ratio increased. The situation applies particularly to pharmaceutical preparations containing potent medications and further studies in this area are underway. A sensitive procedure was worked out for characterizing the type of phosphate present in tetracycline preparations and permitting the analysis of these products on a micro-scale.



Pangamic acid (Vitamin B<sub>15</sub>) widely referred to in the literature as a single compound was shown to be a mixture of variable composition containing sodium gluconate and di-isopropylammonium dichloroacetate, and in some instances also glycine.

In the Natural Products Chemistry section addiction-producing drugs, including narcotics and psychotomimetics, such as opium alkaloids, peyote, ergot, morning glory seeds and marihuana, were examined by classical and modern instrumental techniques. Improved methodologies were developed for medicinal preparations covered by the Narcotic Control Act and microchemical methods established for the analysis of lysergic acid diethylamide (LSD) seized in the illicit drug traffic. As a result of this work, lysergic acid-type alkaloids were also detected in several species of the Convulvulaceae family. Two minor alkaloids related to porphyroxine were isolated from opium and shown to be O-methylporphyroxine and isoporphyrine, respectively. The mushroom Clitocybe dealbata, growing in various regions of Canada and known to have caused severe poisonings, was found to contain muscarine as its toxic principle.

In the Organic Chemistry section synthetic medicinals and pharmaceutical dosage forms included in Schedule F of the Food and Drugs Act (prescription drugs) were examined. A quantitative method of analysis superior to that of the official U. S. P. assay was developed for pyrvinium pamoate. Sensitive methods were applied to the detection of impurities in bulk drugs in order to assess the potency and safety of their use in the production of pharmaceutical preparations marketed in Canada. This problem is assuming greater importance as a result of recent findings of a study mission by senior officers of the Directorate appraising drug control in Europe. The stability of drugs under normal storage conditions was evaluated and photochemical degradation processes studied critically. Clinically important tranquilizers and oral hypoglycemics were subjected to such analyses.

In the Physical and Biopharmacy section, studies were conducted concerning the physical properties of drugs and solid dosage forms. Advanced instrumental methods were applied to the analysis of drug complexes and used in the interpretation of molecular structure. Infrared spectroscopy was successfully employed to characterize alkyl uracil and aminopyrine salts. Experimental data were obtained illustrating the importance of correlating disintegration and dissolution phenomena and a collaborative study was initiated with the clinical laboratories of the Montreal General Hospital to evaluate the effects of pharmaceutical formulation on the therapeutic efficacy of clinically important diuretics. Ten different brands of hydrochlorothiazide tablets were found to disintegrate within five minutes while their dissolution rates varied from five minutes to two hours. These widespread differences suggest an unawareness of the effect of pharmaceutical formulation on drug release in vitro - and, by implication, in vivo. Studies are, therefore, being initiated to assess some of the manufacturing parameters affecting drug dissolution and to develop a dissolution rate test as a criterion on product uniformity.



In the Endocrinology section, studies are underway on development of immunoassays for certain protein hormones, in order to alleviate the necessity for time-consuming and laborious bio-assays of these substances. Rabbits were immunized against a human post menopausal urinary gonadotropic hormone preparation, which contains a number of active principles. The antibodies produced were found to cross-react with gonadotropins from various human sources, but did not react with a partially purified product containing follicle stimulating hormone (FSH), prepared from human pituitaries.

The relationship between molecular structure of adrenocortical hormones and biological activity has been investigated. Available results suggest that the presence of an hydroxyl group in the 11-beta position of the steroid molecule may not be essential for thymolytic activity.

Thyroxine was found to be more effective in preventing goitre formation in rats fed a low-iodine diet than in those given the anti-thyroid drug, thiouracil.

In the Biochemistry section, various drugs, including isoniazid, nialamide and gentisamide, were shown to suppress in vitro, the enzymatic conversion of the vitamin nicotinamide to its metabolically active form. These drugs also depressed serum nicotinamide levels in the rat. The anti-anxiety drugs reserpine and chlorpromazine enhanced liver concentrations of the essential cofactor nicotinamide adenine dinucleotide arising from nicotinamide administration, whereas acetylsalicylic acid had a depressive effect.

In other studies, DDA (the principal urinary metabolite of the insecticide DDT), the herbicide 2,4-D, and nicotinic acid, produced marked decreases in plasma sulfanilamide levels in rats given sulfanilamide. Preliminary results suggested that DDA may combine with choline to form DDA-choline, which could be implicated in the neurological symptoms produced by DDT poisoning. Accordingly, DDA-choline was synthesized and its pharmacological activity is being tested.

Recent studies have shown that diaminophenylazo-pyridine, a drug which has been used for many years in the treatment of urinary tract infections, breaks down in the liver to release aniline, a toxic substance.

The toxicity of various drugs was tested in the tissue culture laboratory, using three strains of human cell lines.

Metabolic effects of new and novel therapeutic agents for treatment of gout, arthritis and related diseases are being investigated from the standpoint of toxicity and undesirable side reactions.

In the Pharmacology section, studies are in progress on the mode of action of certain drugs which act on the muscles of various internal organs such as the heart, intestinal tract and blood vessels. It was shown that drug-induced contraction or relaxation of these muscles apparently involves



stimulation of the same or similar drug receptors. Work is continuing on differentiation of drug receptors in various smooth muscle preparations.

In the Pathology and Toxicology section, extensive gross and histological studies were made on tissues from animals used in toxicity studies involving a variety of foods, drugs, pesticides and food additives. Malignant muscle tumors were induced in rats by intramuscular injection of a food colour used in some countries but not permitted in Canada. These were readily transplantable to other animals. Studies were initiated to define more precisely the exact nature of the carcinogenic agent in the food colour involved.

New techniques for evaluating the carcinogenic hazards of drugs and food additives were explored. Immature or suckling rats and mice appeared more sensitive to carcinogens and had a shorter latent period for tumor development than did older animals. Comparisons were made by various methods for early detection of tumors.

Studies were continued on the effects of individual versus community housing on the toxicity of drugs to the rat. Rats from each type of housing had a characteristic rate and pattern of growth and the acute toxic responses to various drugs were influenced by the type of housing used.

The toxicity of several widely used insecticides was studied by injecting the substances into incubating chicken or duck eggs. Most of the insecticides used killed the developing embryos at relatively low concentrations. Interference with normal bone development was frequently observed.

Studies were initiated on the effects of light on the pineal gland of the rat.

#### Biometrics Section

A large portion of the work of the Biometrics section was in the design and analysis of experiments within the Research Laboratories. Examples in this area include: the rates of decline of DDT components in steers following the consumption of contaminated grass; the uniformity of weight test as an indication of tablet potency, and methodology in chronic toxicity tests. The section was called upon occasionally by other units within the Department as in the case of bentonite flocculation titers in tuberculosis (Laboratory of Hygiene).

The Biometrics section also worked with other units of the Directorate to effect solutions where the use of statistics was helpful. The Bureau of Scientific Advisory Services and the Bureau of Operations both used the section during the year. Examples from the latter include: the design of collaborative assays run in the Region Laboratories in co-operation with the Research Laboratories, and a theoretical discussion of problems associated with the use of tolerances in the work of the Directorate.



## Experimental Animals Section

The responsibilities of the Experimental Animals section include the production, care, maintenance and procurement of all animals required by the various divisions of the Food and Drug Directorate. Animals maintained in the colony included cats, dogs, rabbits, guinea pigs, pigeons, rats and mice. Approximately 9,500 mice and 17,000 rats were raised in the facility.

A diagnostic laboratory was established, under the supervision of the veterinarian-in-charge, which provided diagnoses, treatment, control and eradication of diseases and parasites affecting colony animals. Routine appraisals of the health status of all animals were made.

Members of the section were involved in several research projects with various divisions of the Directorate and advice and technical assistance was provided to personnel using laboratory animals.

## Instrumentation Section

Adaptation of a densitometer has been made so that automatic recording of X-ray diffraction films can be carried out. This will alleviate the tedium and reduce the time necessary for the interpretation of films. The sensitive method for the determination of lead, reported last year, has been applied to a number of food samples. Infrared analysis of some Vitamin A-related compounds has elucidated the structures and provided a possible explanation for biological and chemical results.

## Administrative Services

The Directorate's office and laboratory facilities were considerably enlarged. This consisted of new laboratories and offices for the East Central and Central Regions at Montreal and Toronto and a new office wing for the headquarters establishment at Ottawa. The headquarters laboratory was also enlarged by the conversion of extensive office areas to laboratories and an electron microscope was installed. Work was begun on new offices and laboratories in Vancouver and consultant architects were appointed for the construction of major laboratory and office additions to the Ottawa facilities.

The Information Retrieval capabilities were significantly increased by the installation of an electronic microfilm search and retrieval apparatus in March, 1966. This will be used primarily for the storage and retrieval of data on drugs, drug adverse reactions, pesticides, food additives and related subjects.

## Consumer Division

The Consumer Division assumed the status of a staff advisory agency. The groundwork was laid for a comprehensive educational campaign on drug use and abuse and related displays, posters and literature were prepared, including a booklet "Drugs - Handle With Care". Another new booklet written in the Consumer Division was "Food, Drug, Cosmetic Protection for Canadians".



A public health officer from Port-of-Spain, Trinidad, was attached to the division for a period of three months, under an external aid grant, and official visitors from other overseas countries also spent short periods in the division learning about consumer education.

An extensive program of speaking engagements, attendance at consumer gatherings and other consumer activities was discharged and two meetings of the Advisory Council of Consumers were convened.

A second Consumer Consultant was appointed, to operate in the Eastern Region (the Atlantic Provinces) and plans were underway to appoint a third to work in the Central Region (Ontario) area.

#### Narcotic and Controlled Drug Division

The division continued to maintain the required control over both narcotic and controlled drugs without in any way interfering with the necessary distribution of supplies for medical purposes.

Whenever it was possible to meet requests, senior officers of the division lectured to students in medicine and pharmacy as well as nurses' groups in a continuing effort to keep the various professions alerted to the necessity of preventing addiction.

Further progress was made in the development of procedures and assessment of the problems in the controlled drug field with the objective of preventing misuse of amphetamines and barbiturates. Widespread abuse continues of medication containing short-acting barbiturates as well as combinations of these with amphetamines.

During 1965, 198 firms were licensed to deal in narcotics and 295 in controlled drugs. In each case over half the number of dealers were authorized to manufacture pharmaceutical products containing these drugs within the confines of their licences. The remainder acted only as distributors.

The division's policy of obtaining narcotic and controlled drug sales reports at regular intervals from all pharmacies in Canada was continued. Careful screening of these reports furnishes an indication of the effectiveness of domestic control of these drugs: as soon as a trend toward abuse of any narcotic or controlled drug is noticed steps are taken to correct the situation.

A marked example of this was experienced in the last few months of 1965. Screening of sales reports from Ontario pharmacies indicated that in a period of five months, more than 150 different physicians had issued about 450 prescriptions involving almost 12,000 piminodine ethanesulfonate tablets for a number of patients. Although these individuals used many different addresses and also variations of their names, it was possible to identify many as persons with a "history" from a drug standpoint. An intensive police investigation, carried out simultaneously, further assisted in establishing the identity of these persons and also that forgery was



involved in a few instances. Definite information was provided by the police that much of the medication was being re-sold to other persons.

The Department kept closely in touch with the Ontario College of Physicians and Surgeons regarding this most disturbing development and that College published an effective warning to physicians in its January Report regarding the prescribing of narcotics for persons whose previous medical history was not known. The police interviewed many of the prescribing doctors and also laid charges against some of the individuals who were most flagrantly abusing this drug. The Department wrote to most of the physicians involved pointing out the methods being used by this group to obtain drugs and eliciting their co-operation. This concerted action was largely dependent on the original screening of the records.

It continued to be apparent that an intensive sales report review program was both worthwhile and appreciated by the medical and pharmaceutical professions, particularly in relation to controlled drugs, prescriptions which may be repeated by a pharmacist on either written or verbal authority from the prescribing doctor. In many cases where an inquiry was made, the practitioner expressed surprise that the dosage had reached the extent it had and he was enabled to re-assess the case and often to reduce or withdraw the drug being abused.

#### Addiction

During 1965, 282 names were added to the list of persons dependent on drugs in the "street addict" category. On the other side of the ledger about 40 names were deleted because the addict had either died or had had no adverse record for the past 10 years. Medical addicts continued to decline to 251 compared with 273 in 1964. Professional addicts increased by 10 from 132 to 142. There were 3,180 "street addicts" listed in 1965 as compared with 2,947 in 1964, a considerable portion of the increase being in British Columbia where 212 new cases were reported with only 24 being deleted. Figures for the past seven years, for all classes, are as follows:

1959	-	3,408	1963	-	3,355
1960	-	3,295	1964	-	3,352
1961	-	3,395	1965	-	3,573
1962	-	3,576			

#### Convictions

The main drug of addiction in the narcotic field is heroin and accounts for 60% of the 390 convictions registered under the Narcotic Control Act, although a sharp increase in convictions involving marihuana was experienced. Of the 390 convictions, 332 were for illegal possession, 36 for trafficking, 29 for possession for the purposes of trafficking and 3 for securing prescriptions from more than one practitioner. Sixty convictions involving marihuana were recorded as opposed to 28 in the previous year.



In addition, 30 convictions were registered under Part III of the Food and Drugs Act. Of these 24 were for trafficking, 5 for possession for the purpose of trafficking and 1 under the regulations involving a physician.

Controlled drugs found on the illicit market usually arise from thefts from legal channels and misuse or forgery of prescriptions. Individuals convicted for trafficking and possession for the purposes of trafficking often gain their supplies either by forgery or from practitioners by misrepresentation.

The R. C. M. P. and other law enforcement agencies continued in their efforts to keep the illicit traffic in both drug areas at a minimum.

#### Liaison with the Medical, Pharmaceutical and Related Professions

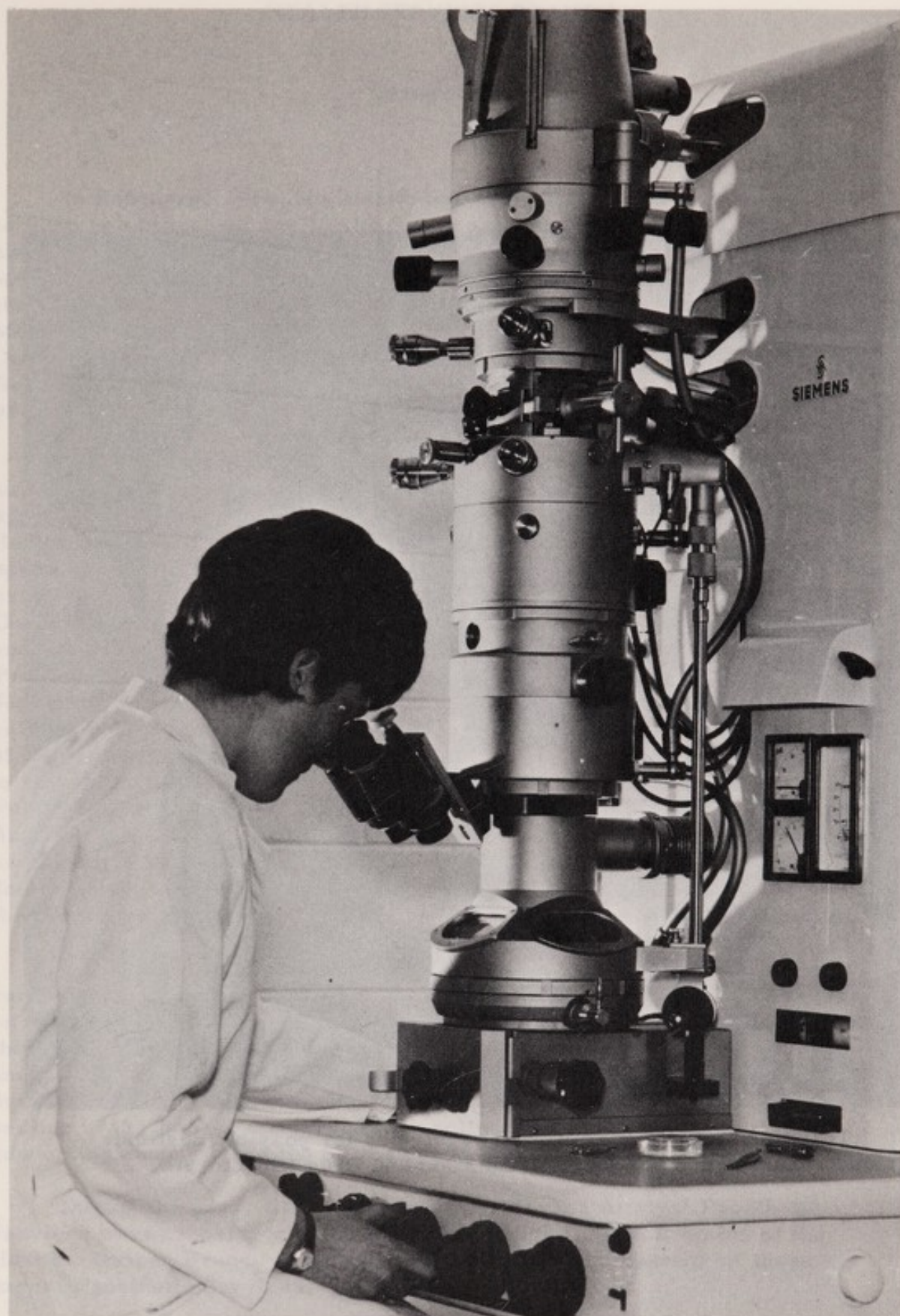
The division continues to extend to and receive from registrars of the medical, pharmaceutical and other related professions, every possible assistance. As a result, it was possible to maintain records as to the status of members of the professions with their provincial colleges and supply college registrars, when necessary, with information of interest to their organizations. Additionally, as a result of this exchange of information, problems faced by professional people were dealt with, and in many cases corrected by means of this mutual co-operation.

#### Inspectional Work

During the year there were 16 inspectors in the field and through their efforts 145 narcotic and 214 controlled drug audits were made at licensed dealers' premises. Additionally, 2,631 retail pharmacies and 994 hospitals were inspected in both areas and 2,676 special interviews were carried out.

#### International Co-operation in the Narcotic Field

All required reports of information were submitted to related organizations within the United Nations, and liaison with narcotic authorities of other countries proved most satisfactory.



The electron microscope is an invaluable tool in laboratory work done by staff of the Food and Drug Directorate, which is charged with the task of helping to protect the food and drug supplies of the Canadian public.





Technicians analyze fruits and vegetables for possible pesticide residue. This is another facet of the Food and Drug Directorate.



## HEALTH SERVICES BRANCH

### Introduction

In February, 1966, the Health Services Directorate was reorganized to form two branches, the Health Services Branch and the Health Insurance and Resources Branch. The Health Services Branch comprises: Aerospace Medicine and Safety, Child and Maternal Health, Dental Health, Emergency Health Services, Epidemiology, Health Education, Laboratory of Hygiene, Medical Rehabilitation, Mental Health, Nursing Advisory Service, Nutrition, Occupational Health, Public Health Engineering, Radiation Protection, and Research Development. It is to these services that this section of the present report refers.

The Health Services Branch is responsible for the provision of consultant and advisory services to the provinces in the development of their special health services and to other branches of the Department of National Health and Welfare and other federal Government Departments. It co-operates with the provinces in the conduct of studies and surveys and provides reference laboratory services to the provinces and the other federal Government branches and departments through the Laboratory of Hygiene and the Occupational Health, Public Health Engineering and Radiation Protection Divisions. Intramural research in divisions within the Health Services Branch and the assessment and co-ordination of extramural research related to health services continue to form an important part of the activities of the Health Services Branch. The Health Services Branch continues also to have obligations arising from the provisions of legislation such as the Public Works Health Act, the Atomic Energy Control Act, the Blind Persons Act, and the Civil Emergency Measures Planning Order (P.C. 1965-1041) and international responsibilities related to Canada's role on the International Joint Commission and various agencies of the United Nations concerned with the promotion of health, including the Food and Agriculture Organization.

Water pollution has constituted a problem of increasing concern in recent years. Members of the Health Services Branch continue to serve on Boards advisory to the International Joint Commission in connection with this matter. A high priority has been accorded the problem by both Canada and the United States, and the Director General of Health Services was, during the fiscal year now completed, appointed Chairman of the Canadian section of the Boards concerned with pollution of the Great Lakes and connecting channels and the St. Lawrence River.

During the year, the Department of Veterans Affairs' Prosthetic Services were transferred to the Medical Rehabilitation Division of the Health Services Branch in order to give civilians the benefits of these expert Prosthetic Services.

A highlight of the Smoking and Health program was a most successful Youth Conference held in Ottawa in May, 1965. Developments in the



specific health fields with which the Health Services Branch is particularly concerned are discussed at greater length in the succeeding sections of this annual report.

The Planning and Evaluation Unit within the office of the Director General continued to assist in the work of the Expert Committee on the Occurrence of Congenital Anomalies, with particular reference to the planning of a surveillance system. The Consultants in the Unit also contributed to the planning and evaluation of the various divisional programs both in the course of the annual program reviews and in connection with special projects. The Consultant, Planning and Evaluation, serves as Chairman of the Subcommittee on Health Services Research. Under the auspices of the Pan-American Health Organization Regional Office of the World Health Organization, he spent a month in Barbados as consultant to the Government of that country in the development of health services. The Medical Consultant in the Unit had a major responsibility in the planning and development of various phases of the Smoking and Health Program. Officers of the Unit assisted in the appraisal of statistical services of the Health Services Branch as well as in the continuing Departmental appraisal of the Report of the Royal Commission on Health Services. Consultative services were again provided to certain non-government agencies including the Canadian Public Health Association, and the Canadian Tuberculosis Association.

#### Health Education

The Health Education Unit was established in 1963 for the purpose of assisting the Director General of Health Services in the coordination of educational activities and resources within the Branch, and to facilitate their implementation in the provinces.

Being primarily an advisory unit, the services of the Consultant in Health Education were provided on request to: (a) the divisions and programs of the Health Services Branch, (b) provincial health authorities, (c) other departmental branches and divisions, and (d) voluntary health agencies and professional associations.

During the past year, over one hundred individual consultations were provided to the divisions and programs of the Branch. These consisted mainly of: assisting in the assessment of needs for health education materials in the provinces; planning, pre-testing and evaluation of films, filmstrips, publications and posters and in the planning of radio scripts; provision of bibliographical references; advising on the availability of educational materials, and methods and techniques of health education.

Three evaluative studies on nutrition and mental health education materials were carried out jointly with the divisions concerned. Evaluation of the departmental bulletin, "Health Education", was also completed during the summer months. In addition, a feasibility study on the use of TV in the Health Services Branch and the Department was initiated by the Branch's Committee on Health Education.



Assistance was provided to the National Health Grants administration in the review of health education projects under the General Public Health Grant, and to the Canadian Smoking and Health Program in the planning of the Canadian Youth Conference and other activities in the area of smoking and health.

The Consultant in Health Education was a member of several departmental committees, among which were the Committee on Public Education, the Medical and Biological Film Library Committee, the Committee on Health Education, and the Advisory Committee on Smoking and Health.

Increased provincial demands for consultation services on new health education programs and materials, as well as the planning of provincial health education conferences resulted in visits to nine provincial divisions of health education. In addition, a regular exchange of health education materials produced by the Department as well as the provincial departments of health, were circulated to all provinces. Frequent contact through correspondence was maintained with the provincial divisions of health education and personal contact with provincial and voluntary health organizations was maintained through attendance of meetings such as the Canadian Conference on Children, Canadian Mental Health Association's and the Canadian Public Health Association's annual conventions, and the Federal-Provincial Conference on Health Education.

Frequent consultation was provided to other branches and divisions in the Department, including the Fitness and Amateur Sports Division, the Food and Drug Directorate (Consumer Section), Personnel Division, Medical Services, and Information Services.

Active liaison was maintained with the major voluntary health agencies and professional associations in order to facilitate the exchange of ideas on new programs and materials and to provide information on health education techniques and methods. Among such agencies were the Canadian Cancer Society, the Canadian Arthritis and Rheumatism Society, the Canadian Tuberculosis Association, Canadian Red Cross Youth, Canadian Mental Health Association, Canadian Heart Foundation, Canadian Medical Association, Canadian Association for Health, Physical Education and Recreation, Canadian Public Health Association, Canadian Health Education Specialists Society, Canadian Education Association, Canadian Teachers Federation, Ontario Education Association, and various professional schools.

To provide health workers in the official and voluntary health agencies with up-to-date information on current health education programs, materials, special events and other items of interest, the Health Education Unit has continued to issue the "Health Education" bulletin, which is published five times a year and reaches over 1,500 key people in the public health field.

A technical resource file system maintained by the Health Education Unit, containing bibliographies to programs, studies and materials in health education was used considerably by the various health agencies during the past year. Plans are under way to improve this service during the next fiscal year.



## HEALTH INSURANCE

The Health Insurance section underwent considerable change during the course of the year under review. On the one hand, it was directly affected by the reorganization of the former Directorate of Health Services, and on the other hand, it was charged with planning in connection with two new proposals pertaining to a Health Resources Fund and to Medical Care.

The reorganization of the Directorate brought changes in staffing, the former Principal Medical Officer, Health Insurance, being appointed Director-General of a newly established Health Insurance and Resources Branch. The former functions of Health Insurance, in so far as they relate to hospital insurance, continue within the Hospital Insurance Directorate of the Branch, while the other functions of the former unit, including medical care, will be allocated to new parallel Directorates within the same Branch, consisting of a Medical Care Directorate and a Health Resources Directorate. The former Health Grants and Hospital Design will also form separate segments of the Branch. Pending the appointment of requisite personnel, all functions related to medical care and the Health Resources Fund were administered by the present staff of Health Insurance.

Health Insurance was directly involved in a number of Federal-Provincial Conferences during the year, in addition to the usual federal-provincial committees associated with hospital insurance. In July, medical care was one of the items on the agenda of the Federal-Provincial Conference of Premiers held in Ottawa. It was at this Conference that the Prime Minister placed before the provincial premiers, federal proposals for sharing the costs of provincially administered medical care plans. He outlined the types of programs which would receive federal financial support. The government's intention to introduce legislation to set up a Health Resources Fund of five hundred million dollars for a fifteen year period was also announced.

In September, a Conference of Ministers of Health was held to discuss matters relating to medical care and to the Health Resources Fund. In October, an Ad Hoc Technical Committee on the Health Resources Fund met in Ottawa to discuss and to prepare a report for the subsequent Federal-Provincial Meeting of Ministers of Health held early in 1966. The close of the year under review saw a further Technical Conference held in Ottawa to establish uniformity in approach and to develop administrative and technical procedures so as to enable the federal government to operate the Health Resources Fund to the satisfaction of the provinces. All of these conferences were attended and served by the staff of Health Insurance.

A meeting was held during the year of the Advisory Committee on Hospital Insurance and Diagnostic Services.

In addition to these functions, Health Insurance continued to carry out the administrative responsibilities in relation to the Hospital Insurance and Diagnostic Services program. The consultants attached to the Unit provided considerable services to the provinces and the recruitment of additional consultants for the Hospital Services Study Unit made possible

TABLE 1

## PAYMENTS BY CANADA UNDER HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES ACT

PROVINCE	1958-59	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	TOTAL
Newfoundland	\$ 2,857,886.84	\$ 4,707,692.94	\$ 5,094,934.21	\$ 6,258,287.26	\$ 7,472,463.28	\$ 8,724,909.88	\$ 9,623,951.21	\$ 11,649,657.78	\$ 56,389,783.40
Prince Edward Island	---	447,338.27	1,010,806.54	1,381,894.39	1,673,681.11	1,922,524.26	2,102,585.78	2,436,076.68	10,974,907.03
Nova Scotia	1,572,782.64	8,162,540.78	9,595,387.52	11,872,932.01	13,519,974.70	15,174,842.90	15,902,172.05	18,078,038.58	93,878,671.18
New Brunswick	---	4,575,374.90	7,914,412.71	9,546,774.26	10,894,711.87	12,611,337.91	13,750,895.84	14,919,440.31	74,212,947.80
Quebec <sup>(1)</sup>	---	---	73,936,740.72	73,022,517.78	88,713,635.41	113,848,887.58	95,998,751.05	5,299,733.76	390,820,266.30
Ontario <sup>(2)</sup>	13,140,213.12	71,892,833.66	84,484,271.86	104,498,880.55	122,103,382.61	136,039,776.87	151,677,498.15	171,899,251.27	855,736,108.09
Manitoba	7,148,534.97	11,324,466.35	13,048,916.19	15,245,924.23	17,348,934.08	19,664,963.78	20,947,876.73	23,131,484.98	127,861,101.31
Saskatchewan	8,430,441.93	13,378,379.43	14,453,463.99	15,953,810.19	18,278,458.50	21,312,084.05	23,526,106.20	25,868,645.55	141,201,389.84
Alberta	8,774,575.68	15,698,727.86	16,905,597.57	19,730,547.07	25,784,973.30	28,310,623.43	31,447,963.95	36,859,944.96	183,512,953.82
British Columbia	12,784,038.88	20,406,091.56	22,493,438.52	25,697,550.94	30,049,147.43	33,687,396.64	36,057,502.19	40,545,529.34	221,720,695.50
Yukon	---	---	168,683.75	296,036.35	310,267.36	349,443.34	307,577.82	356,797.56	1,788,806.18
Northwest Territories	---	---	261,849.89	377,941.52	523,148.02	597,444.71	579,608.16	721,748.44	3,061,740.74
CANADA	\$54,708,474.06	\$150,593,445.75	\$189,368,503.47	\$283,883,096.55	\$336,672,777.67	\$392,244,235.35	\$401,922,489.13	\$351,766,349.21	\$2,161,159,371.19

(1) Excluding an amount of \$32,159,930.88 paid to Quebec for January, February and March, 1965, which has been recovered upon the signing of the supplementary agreement under the Established Programs (Interim Arrangement) Act.  
The amount paid in 1965-66 is the final payment with respect to the calendar year 1963.

(2) Payment on account of refund (\$200,000.00) received from Ontario in August, 1964, and applicable to calendar years 1959, 1960 and 1961 is not taken into account in this table.



the initiation of the preparatory work associated with the undertaking of research projects.

During the year under review there were few significant changes made in provincial hospital insurance legislation or in the federal-provincial agreements pursuant to the Hospital Insurance and Diagnostic Services Act. However, the province of Quebec availed itself of the provisions contained in the Established Programs (Interim Arrangements Act) by entering into a supplemental agreement on October 27, 1965, with retroactive effect to January 1, 1965, so as to assume full responsibility for the administration and the financing of the Quebec hospital insurance program as set out in the original agreement. In accordance with the terms of the supplemental agreement, the federal government abated the federal tax on the incomes of Quebec residents by 14%.

During the year under review federal payments to the province in accordance with agreements under the Hospital Insurance and Diagnostic Services Act totalled over \$350 million.

## INTERNATIONAL HEALTH

Activities under the International Health program continued to expand in a variety of areas - many continuing - some new. As reported on previous occasions advice and practical assistance were provided to the External Aid Office towards implementation of health-oriented programs in various developing countries having bilateral aid agreements with Canada. Health training is arranged for a number of persons coming to Canada each year under the different technical co-operation schemes; during 1965, 112 trainees arrived, bringing the total number of trainees in Canada during the year to 282. These persons were working in a wide range of health disciplines under the External Aid Office Program.

Canadian experts in health legislation, health administration and related areas undertook specific assignments abroad during the year, and specialists in a number of clinical fields were provided in response to requests from the developing countries. A number of burgeoning medical schools are also benefitting from the help of teachers of medical and paramedical sciences.

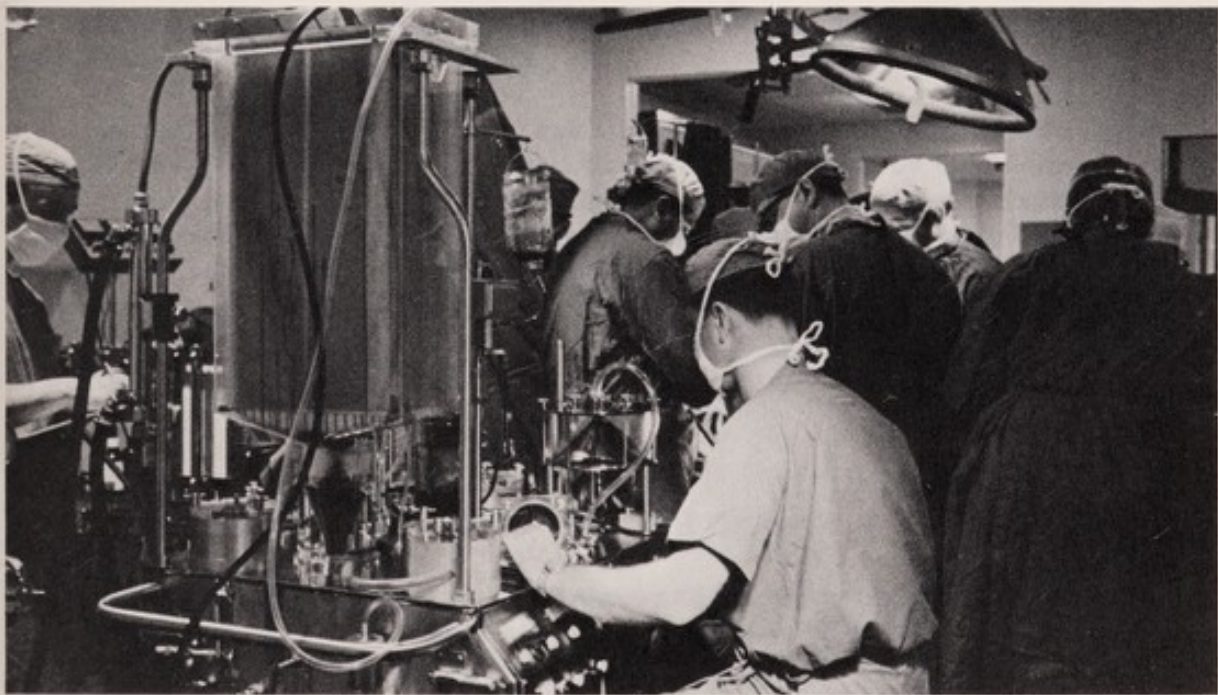
A notable trend during the past year has been the increasing scope of health projects being initiated in the French-language countries of Africa and Asia.

In the multilateral health field, Canada through its Delegation continued its efforts to shape the program of the World Health Organization in the most constructive way within economical limitations. At the Eighteenth World Health Assembly, the Canadian Delegation, with other like-minded members, opposed the trend toward a massive WHO operational research program. A reasonable degree of success was achieved, with the budget for WHO in 1966 being maintained at a level of U.S. \$42,442,000. Progress was made on some health questions of world import such as population



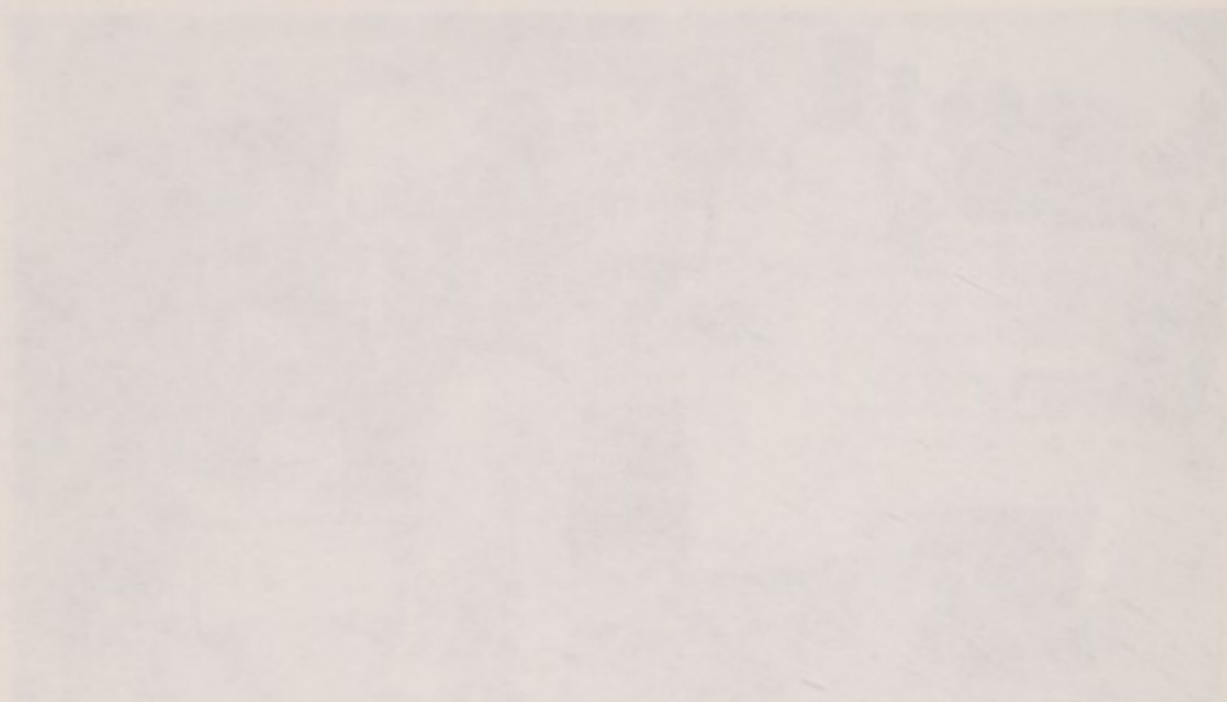


A Nigerian boy gets an injection of penicillin, which will cure him of yaws, an ugly, tissue-destroying disease common in tropical countries. Money for the treatment program came from SWAY -- Students War Against Yaws -- a project of Canadian high school students. The department's Principal Medical Officer, International Health, provided liaison between the SWAY Committee and the World Health Organization, which conducted the actual treatment program.



Funds provided through the department's National Health Grants help to defray costs of equipment for Canadian hospitals. This blood oxygenation equipment is being used during open heart surgery.





A photograph of a person in a white coat, possibly a nurse or doctor, standing next to a patient. The person in the white coat is looking down at the patient. The patient is lying down, and their face is partially visible. The background is dark and indistinct.



Figure 1. A photograph of a person in a white coat, possibly a nurse or doctor, standing next to a patient. The person in the white coat is looking down at the patient. The patient is lying down, and their face is partially visible. The background is dark and indistinct.

problems, the needs of medical schools, universal adherence to the Single Convention on Narcotic Drugs, the urgency of national and international control measures for other dependence - producing drugs and the advisability of creating an international monitoring system for adverse drug reaction.

The Minister attended and addressed the Assembly in the general debate, emphasizing Canada's initiative in the fight against cigarette smoking, and its approach to the problem through enlisting the help of the younger generation.

During September, the Minister also attended the Pan American Health Organization/World Health Organization Meeting marking the inauguration of the new Headquarters Building in Washington, D.C. Miss LaMarsh personally announced and presented the gift from Canada of a painting - by Jean McEwen of Montreal - to be permanently installed in the Headquarters Building. Other "Observer" members of the Delegation were the Principal Medical Officer, International Health, and his assistant.

The year also marked the initiation of discussions on a formal basis by the members of the Commonwealth on mutual assistance programs in the health field. Canada participated actively at the First Commonwealth Medical Conference in Edinburgh during October 1965. The delegation included the Minister of National Health and Welfare, the Deputy Minister of National Health and representatives of medical schools and professional associations. Useful conclusions and agreements were reached, to be reported upon at successive World Health Assemblies informally, and at a Second Commonwealth Medical Conference after three years.

On the invitation of the Eighteenth World Health Assembly, Canada contributed the furnishings for a committee room in the new Headquarters Building of the WHO, in the amount of \$17,000, to be installed during the occupancy of the building in 1966.

A recent development of great significance for Canada's contribution to world health betterment has been the establishment, by Order-in-Council, of an Advisory Committee on International Health whose membership will include representatives of our national health institutions, both educational and professional, and of both cultures. It will not only aim at a clear delineation of Canada's policy towards health assistance overseas but also act, it is hoped, as an effective co-ordinator of present and future efforts towards implementation of this policy.

## NATIONAL HEALTH GRANTS

When the National Health Grants were inaugurated in May, 1948, their stated purposes included strengthening general public health services in those areas where the provincial authorities most keenly recognized the need; intensified efforts toward the control of tuberculosis, mental illness and cancer; the stimulation and development of public health research and of training programs for public health and hospital personnel; and assistance toward the costs of hospital construction.



Although the program has undergone numerous modifications during the ensuing 18 years, in response to changing conditions and new challenges, its basic objectives have not changed and its 1965-66 activities were again directed toward these goals.

In contrast to the early years, when the amounts available to the provinces were not fully utilized, the provinces and territories in 1965-66 committed approximately 98% of the funds available under the general health grants and 76% of the amount available for hospital construction. Although the money was available, continuing shortages of skilled personnel prevented some approved projects from being started and inhibited others from being fully carried out according to plan.

However, funds were used for the extension of local health services for both rural and urban areas; the training and employment of many categories of health workers; continuing efforts to find new cases and to control tuberculosis; the development of improved cancer diagnostic and treatment facilities and the support of research into possible causes of cancer and improved methods of diagnosis and treatment; the support of medical rehabilitation services (including home care) and of programs to prevent and treat mental illness; the encouragement of sound research in public health; and the improvement of care given to mothers and their children.

The grants continued to assist with 50% of the cost of vaccine against poliomyelitis--a program which has virtually eliminated this disease from Canada--and one province undertook a province-wide program, with similar financial support, using a new vaccine against measles. Several provinces, with grants assistance, carried out pilot projects for the detection of phenylketonuria (PKU) in infants, with a view to developing administrative techniques which would permit this test to be integrated with other diagnostic tests carried out in hospitals.

A phase of the grants program which has assumed greater significance within recent years and particularly since the publication of the report of the Royal Commission on Health Services is the support given to universities in almost all provinces for the development of schools or specific courses for the training of health workers. Grants support has been given for such recurring expenditures as salaries of staff and the purchase of equipment and supplies in such fields as psychiatry, psychology, social work, nursing, physiotherapy and occupational therapy, public health and preventive medicine, and training of technicians.

On February 1, 1966, the Minister of National Health and Welfare announced the federal government's intention to extend the Hospital Construction Grant for an additional period of two years, i. e., until March 31, 1970. As some provinces had already exhausted the allotments which they were expected to receive up to the anticipated terminal date of March 31, 1968, this action permitted federal support to be undertaken for a large number of building projects, notably in Ontario and Alberta.



## Administration

Grants are available to the provinces and territories under terms and conditions approved by the Governor in Council and upon certification by the Minister that a province has agreed thereto. General conditions which apply to all grants are that the projects be submitted as a part of a satisfactory provincial plan or program for the development of the relevant health services and that the province undertakes to (1) expend the moneys received out of its share of the grant for the development of the approved plan or program; (2) furnish from time to time reports and statements of expenditure; (3) refund unexpended moneys on completion of any project or at the end of the fiscal year, whichever is earlier; and (4) maintain adequate records and accounts. Payment is based on the submission of audited claims for reimbursement of expenditures made by the provincial or territorial governments.

No major changes were made in the basic structure of the program during the year, but the manual of administrative procedures was revised, on principles recommended by the Royal Commission on Government Organization, to give the provinces greater freedom in the day-to-day administration of the grants and to eliminate certain administrative procedures no longer regarded as essential.

Quebec was the only province which indicated its desire to take advantage of the provisions of the Established Programs (Interim Arrangements) Act in so far as the National Health Grants are concerned. Several meetings were held with provincial authorities in Quebec to work out mutually acceptable procedures for carrying out the terms of this Act.

Continuing study was given during the year to the possible role of the grants in carrying out the recommendations of the Royal Commission on Health Services and to their position in the event of changes in federal-provincial fiscal arrangements. Toward the close of the year, intensive studies were undertaken concerning the relationship between the Hospital Construction Grant and the proposed Health Resources Fund.

## Expenditures

Federal expenditures under this program totalled approximately \$45,478,000 during the fiscal year -- \$17,622,000 for hospital construction and \$27,856,000 for the other health grants. These figures represent a decrease of about \$3,890,000 for hospital construction and about \$7,331,000 for the other grants as compared with 1964-65. It should be noted, however, that these figures include payments to Quebec only for hospital construction and public health research which are not included in the terms of the Established Programs (Interim Arrangements) Act. Other payments to or adjustments to be made with Quebec are to be completed by the Department of Finance under the terms of this Act.

Additional details of expenditures are shown in the accompanying tables.



TABLE 2

## EXPENDITURES UNDER THE NATIONAL HEALTH GRANTS 1965-66

Province	Hospital Construction Grants	GENERAL HEALTH GRANTS									Total Health Grants
		Professional Training	Mental Health	Tuberculosis Control	Public Health Research	General Public Health (a)	Cancer Control	Medical Rehabilitation and Crippled Children	Child and Maternal Health	Total	
Newfoundland	\$ 976,428	\$ 100,430	\$ 178,941	\$ 195,638	\$ 18,033	\$ 383,191	\$ 3,450	\$ 101,000	\$ 60,481	\$ 1,041,164	\$ 2,017,592
Prince Edward Island	201,835	10,922	128,672	33,673	18,798	178,139	15,557	10,992	7,313	404,066	605,901
Nova Scotia	759,147	52,421	392,589	77,598	178,900	774,863	43,832	89,146	85,233	1,694,582	2,453,729
New Brunswick	127,267	65,128	310,999	71,718	51,827	581,525	68,370	99,220	75,336	1,324,123	1,451,390
Quebec	3,464,408	---	---	---	1,102,170	---	---	---	---	1,102,170 (b)	4,566,578
Ontario	6,918,796	598,500	2,777,581	844,681	1,448,359	4,491,734	497,448	929,671	384,323	11,972,297	18,891,093
Manitoba	975,880	90,116	441,074	86,539	626,035	885,496	---	145,479	70,699	2,345,437	3,321,317
Saskatchewan	1,101,126	84,156	352,115	81,023	214,620	708,190	99,210	110,258	68,073	1,717,645	2,818,771
Alberta	1,601,390	130,091	655,754	117,118	130,445	1,217,576	145,471	92,392	106,622	2,595,469	4,196,859
British Columbia	1,459,331	148,262	638,225	187,629	417,373	1,529,437	259,419	261,319	61,683	3,503,347	4,962,678
Northwest Territories	36,430	---	---	---	8,000	90,019	---	---	---	98,019	134,449
Yukon	---	---	33,911	23,700	---	---	---	---	---	57,611	57,611
TOTAL	\$17,622,038	\$1,280,026	\$5,909,861	\$1,719,316	\$4,214,560	\$10,840,170	\$1,132,757	\$1,839,477	\$ 919,763	\$27,855,930	\$45,477,968

(a) Out of the special allocation of \$300,000, the following amount was expended: Ontario - \$30,729.

(b) Total excludes an estimated amount of \$9,500,000 which may represent Quebec's entitlement under the Established Programs (Interim Arrangement) Act.

TABLE 3

STATEMENT OF PAYMENTS OF GENERAL HEALTH AND HOSPITAL CONSTRUCTION GRANTS TO PROVINCES FROM  
INCEPTION OF POLICY IN 1948 TO CLOSE OF CURRENT FISCAL YEAR

Grant	Newfoundland	Nova Scotia	Prince Edward Island	New Brunswick	Quebec	Ontario	Manitoba	Saskat- chewan	Alberta	British Columbia	Northwest Territories	Yukon Territory	Total
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Hospital Construction	5,283,825	10,113,638	1,414,998	7,333,471	66,512,946	81,851,134	12,443,410	12,637,224	17,571,411	18,289,023	131,506	23,855	233,606,441
Health Survey	20,025	30,639	15,000	27,454	147,771	147,214	29,052	43,502	39,808	20,104	---	---	520,569
Laboratory and Radiological Services	964,954	1,247,785	169,276	1,453,330	4,417,046	330,688	1,857,640	1,803,433	1,117,703	785,988	---	---	14,147,843
Veneral Disease Control	179,560	277,072	45,036	223,851	1,246,438	1,579,385	338,083	339,951	394,331	504,569	---	724	5,129,000
General Public Health	4,290,461	7,702,017	1,744,341	5,588,881	21,685,712	36,223,322	8,287,082	8,101,688	11,069,219	14,937,898	516,022	36,308	120,182,951
Tuberculosis Control	2,944,748	3,348,469	693,750	2,677,574	24,565,767	13,096,110	2,967,907	3,281,572	3,744,388	4,711,404	70,443	241,239	62,343,371
Mental Health	2,696,778	4,626,009	1,148,650	4,178,605	28,157,603	32,372,040	5,417,953	6,223,787	8,124,941	9,121,480	---	163,301	102,231,147
Professional Training	682,056	736,339	154,722	612,302	4,310,931	5,095,322	787,281	721,897	1,080,143	1,122,171	28,287	605	15,332,056
Cancer Control	532,553	1,647,253	209,269	1,842,420	12,893,833	13,089,837	2,354,346	3,541,357	4,199,322	4,037,951	40,330	461	44,388,932
Public Health Research	27,870	817,112	28,073	123,807	5,312,964	5,764,719	1,170,061	710,096	735,679	1,192,454	89,094	---	15,971,929
Medical Rehabilitation and Crippled Children	640,147	700,014	158,162	1,090,484	4,969,312	4,277,193	1,456,426	1,158,799	1,075,373	1,964,115	24,126	---	17,514,151
Child and Maternal Health	521,619	833,974	135,061	630,318	4,273,188	4,178,858	980,143	1,027,416	1,117,932	1,015,170	374	5,973	14,720,026
TOTAL	18,784,596	52,080,321	5,916,338	25,782,497	178,493,511	198,005,822	38,089,384	39,590,722	50,270,250	57,702,327	900,182	472,466	646,088,416



## RESEARCH DEVELOPMENT

The Research Development Section co-ordinates all aspects of the department's scientific and medical research programs, and maintains liaison with other federal government and national voluntary agencies that support medical research. Independent scientific appraisal of applications for research grants is arranged. Contact is maintained with recipients of such grants on technical aspects of their research work. Research grants under this program are made on a project basis, implying an application to a defined problem which is of interest to provincial and federal public health services. They are, therefore, related to the "burden of disease" in Canada. Studies are conducted to aid in defining these diseases and the services involved.

Emphasis is placed on:

- (a) Prevention of disease or disability
- (b) Operational or administrative studies
- (c) Epidemiological studies
- (d) Environmental Health, including sanitation.

The application to established Canadian health needs and health services, as sponsored by provincial and national health departments, helps to distinguish this research program.

### Intramural Research

Research is carried on within the Department, in well-equipped laboratories or in the clinic services of the Health Branch, while, in the Administration Branch, studies are conducted in the socio-economic field. Estimates provided by the reporting units indicate a total intramural research budget of \$2,829,600, which is an increase of about \$347,800 over that for 1964-65.

### Total Assistance for Research 1965-66

A total of \$7,255,110 was available for intramural research activities together with the extramural research assisted by the Public Health Research Grant. This represents a slight increase over the total sum available for a similar period in 1964-65.

### Extramural Research

Commencing with the fiscal year 1965-66 National Health Grant research funds have been consolidated under the Public Health Research Grant. This is a pooled grant, on a non-sharing basis and is not allocated in specific amounts to provinces. It is calculated at 23 cents per head of population. The amount available in 1965-66 was \$4,424,510, the whole of which was allocated to research projects, augmented by certain transfers from other Grants by particular provinces for purposes such as cancer research.

TABLE 4

## SUMMARY OF INTRAMURAL RESEARCH PROGRAM - 1965-66

REPORTING UNIT AND TYPE OF COST	ESTIMATED RESEARCH BUDGET: IN \$(000's)	PER CENT OF TOTAL FOR DEPARTMENT
<u>HEALTH BRANCH</u>		
<u>FOOD AND DRUG DIRECTORATE:</u>		
Research and Development Costs .....	<u>946.0</u>	<u>33.4</u>
<u>HEALTH SERVICES DIRECTORATE:</u>		
<u>Research and Development Costs</u>		
Emergency Health Services Division .....	4.3	0.1
Laboratory of Hygiene .....	242.9	8.6
Occupational Health Division .....	307.4	10.9
Radiation Protection Division .....	347.0	12.3
Nutrition Division .....	8.0	0.3
Public Health Engineering Division .....	<u>96.0</u>	<u>3.4</u>
Sub-total	<u>1,005.6</u>	<u>35.6</u>
<u>Scientific Data Collection Costs</u>		
Epidemiology Division .....	67.0	2.4
Mental Health Division .....	10.0	0.4
Dental Health Division .....	13.0	0.5
Medical Rehabilitation Division .....	0.8	
Hospital Design Division .....	15.0	0.5
Health Insurance Division .....	<u>68.2</u>	<u>2.4</u>
Sub-total	<u>174.0</u>	<u>6.2</u>
TOTAL HEALTH SERVICES DIRECTORATE	<u>1,179.6</u>	<u>41.7</u>
<u>MEDICAL SERVICES DIRECTORATE</u>		
Research Development Costs .....	<u>156.0</u>	<u>5.5</u>
TOTAL HEALTH BRANCH	<u>2,281.6</u>	<u>80.6</u>
<u>ADMINISTRATION BRANCH</u>		
<u>Scientific Information Costs</u>		
Library .....	80.0	2.8
<u>Scientific Data Collection Costs</u>		
Research and Statistics Division .....	<u>468.0</u>	<u>16.5</u>
TOTAL ADMINISTRATION BRANCH	<u>548.0</u>	<u>19.3</u>
<u>HEALTH AND ADMINISTRATION BRANCH</u>		
Total Research and Development Costs .....	2,107.6	74.5
Total Scientific Data Collection Costs .....	642.0	22.7
Total Scientific Information Costs .....	<u>80.0</u>	<u>2.8</u>
TOTAL INTRAMURAL RESEARCH COSTS ESTIMATED FOR THE DEPARTMENT .....	<u>2,829.6</u>	<u>100.0</u>

Note: Figures are from Survey carried out in Spring of 1965.



TABLE 5

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
TO DEPARTMENTS OF UNIVERSITIES, HOSPITALS, ETC. - 1965-66

Department	Number of Projects	Amount \$	Amount as % of Total
Allergy	2	24,454	0.6
Anaesthesia	2	10,700	0.3
Anatomy	--	--	--
Bacteriology	13	125,968	3.1
Biochemistry	1	7,700	0.2
Biology	--	--	--
Biomedical Engineering	1	45,010	1.1
Biophysics	1	19,695	0.5
Chemistry	2	34,202	0.9
Clinical Investigation Unit	6	114,242	2.8
Dentistry	6	57,673	1.4
Endocrinology	--	--	--
Genetics	2	25,946	0.6
Gynaecology	--	--	--
Haematology	3	17,181	0.4
Histology, Embryology	--	--	--
Laboratory (Hospital)	4	30,450	0.8
Medical Jurisprudence and Ethics	--	--	--
Medical Research Institutes	19	858,251	21.3
Medicine	29	325,806	8.1
Microbiology	4	39,145	1.0
Neurology and Neurosurgery	2	35,360	0.9
Nursing	--	--	--
Nutrition	1	8,980	0.2
Obstetrics	14	124,643	3.1
Ophthalmology	11	151,534	3.8
Otolaryngology	1	10,000	0.2
Paediatrics	33	305,265	7.6
Parasitology	2	23,000	0.6
Pathological Chemistry	--	--	--
Pathology	2	20,950	0.5
Pharmacology	6	67,955	1.7
Pharmacy	1	8,500	0.2
Physiology	3	20,108	0.5
Physiological Hygiene	5	48,900	1.2
Physical Medicine, Rehabilitative Medicine	1	12,510	0.3
Physics	1	12,300	0.3
Psychology	15	150,192	3.7
Psychiatry	27	365,839	9.1
Public Health, Social and Preventive Medicine	40	428,780	10.7
Radiology	--	--	--
Schools of Hygiene, Nursing, etc.	3	24,824	0.6
Social Work	--	--	--
Sociology, Anthropology	--	--	--
Speech Pathology, Audiology	1	6,645	0.2
Surgery	19	312,952	7.8
Zoology	--	--	--
Other Departments	18	147,109	3.7
TOTAL	301	4,022,769	100.0

Note: The sums stated in this Table are those initially approved at July 2, 1965.

TABLE 6

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
ACCORDING TO FIELD OF INVESTIGATION - 1965-66

Field of Investigation	Number of Projects	Amount \$	Amount as % of Total
Allergy	5	54,704	1.4
Anaesthesiology	1	4,000	0.1
Anatomy	1	2,400	0.1
Anthropology	2	12,120	0.3
Bacteriology	14	204,693	5.1
Biochemistry	14	115,492	2.9
Biomedical Engineering	5	54,063	1.3
Biophysics	1	5,000	0.1
Dentistry	6	58,942	1.5
Dermatology	1	6,000	0.1
Endocrinology	4	43,626	1.1
Environmental Medicine, Industrial Health, Toxicology	11	176,757	4.4
Epidemiology, Biostatistics	14	157,589	3.9
Genetics	2	16,986	0.4
Gerontology	5	86,680	2.2
Gynaecology	--	--	--
Haematology	9	86,478	2.2
Immunology, Serology	5	37,482	0.9
Medicine	17	274,483	6.8
Medical Administration and Education	18	186,449	4.6
Neurology, Neurosurgery	6	85,040	2.1
Obstetrics	4	43,445	1.1
Ophthalmology	12	176,929	4.4
Otorhinolaryngology	7	36,130	0.9
Paediatrics	15	171,688	4.3
Parasitology, Mycology	2	23,000	0.6
Pathology	5	53,526	1.3
Pharmacology, Therapeutics	12	113,664	2.8
Physical Medicine, Rehabilitation	7	278,448	6.9
Physiology, Metabolism	11	110,303	2.7
Preventive Medicine	2	15,221	0.4
Psychiatry	38	397,576	9.9
Psychology	6	96,179	2.4
Radiobiology	2	22,700	0.6
Radiology	1	4,500	0.1
Sanitary Engineering	9	99,409	2.5
Social Medicine, Sociology	5	70,341	1.7
Surgery	13	197,043	4.9
Virology	7	73,603	1.8
Unclassifiable	2	370,080	9.2
<b>TOTAL</b>	<b>301</b>	<b>4,022,769</b>	<b>100.0</b>

Note: The sums stated in this Table are those initially approved at July 2, 1965.



TABLE 7

DISTRIBUTION OF RESEARCH FUNDS UNDER NATIONAL HEALTH GRANTS  
ACCORDING TO DISEASE GROUPS - 1965-66

Class of Disease	Number of Projects	Amount \$	Amount as % of Total
Infective and Parasitic Diseases	30	393,363	9.8
Neoplasms	5	382,705	9.5
Allergic, Endocrine System, Metabolic and Nutritional Diseases	25	267,375	6.7
Diseases of the Blood and Blood-forming Organs	9	140,361	3.5
Mental, Psychoneurotic, and Personality Disorders	51	603,485	15.0
Diseases of the Nervous System and Sense Organs	29	337,448	8.4
Diseases of the Circulatory System	25	356,940	8.9
Diseases of the Respiratory System	17	197,248	4.9
Diseases of the Digestive System	8	75,940	1.9
Diseases of the Genito-Urinary System	3	14,150	0.4
Deliveries and Complications of Pregnancy, Childbirth and the Puerperium	3	32,970	0.8
Diseases of the Skin and Cellular Tissue	1	6,000	0.1
Diseases of the Bones and Organs of Movement	6	185,448	4.6
Congenital Malformations	4	92,540	2.3
Certain Diseases of Early Infancy	5	60,228	1.5
Symptoms, Senility and Ill-defined Conditions	2	16,820	0.4
Accidents, Poisonings, and Violence (Nature of Injury)	5	73,620	1.8
Diverse Disease Entities	30	375,440	9.3
No Disease Entity Involved (Chiefly Administrative)	43	410,688	10.2
TOTAL	301	4,022,769	100.0

Note: The sums stated in this Table are those initially approved at July 2, 1965.

## SPECIAL PROJECTS

During the year 1965-66, this section was transferred from the Health Services Directorate to the Office of the Deputy Minister of Health. It continues to be responsible for special health programs and projects which are referred to it from time to time and which do not come within the specific terms of reference of other units of the Department. The Principal Medical Officer, Special Projects, is also adviser to the Deputy Minister on program planning and operations of the Department relating to the health field.

### Technical Assistance to Expo '67

This office continued to serve as a clearinghouse for all technical services provided by the Department to Expo '67. The Principal Medical Officer acted as liaison officer between the Department and the Medical Services Section of Expo '67, serving on the Executive Committee of the Medical Advisory Board of that Corporation.

The Department provided continuing and substantial technical assistance in many areas relating to programming, planning of its medical care and hospital services and the control of its environmental health services.

In addition to the above, several consultants of this Department provided advisory services to Expo '67 in the planning of a large health exhibit (Man and His Health). This project was designed to enlighten Expo visitors with regard to the phenomena of man's physical and mental well-being, the manner in which related problems have been faced and overcome, the state of man's health today and his prospects for the future.

### Co-ordination of poverty and special programs

Under the Deputy Minister's direction, this office has assumed the responsibility for the co-ordination of departmental health programs against poverty. The Department participated in the Federal-Provincial Conference which took place in Ottawa in December 1965 during which basic papers dealing with the role of health programs against poverty were presented by departmental representatives.

Since that Conference, the Department has maintained a close working relationship with the Special Planning Secretariat of the Privy Council concerned with the development and co-ordination of programs against poverty in Canada.

A general meeting was attended by departmental consultants whose activities are closely related to anti-poverty programs and by senior officers of the Special Planning Secretariat. The fundamental role of departmental health programs to eliminate the gap between services and health needs was reviewed. Existing and proposed health programs in the broad field of hospital and institutional care, medical care and related services, rehabilitative care and preventive services were also discussed by participants.



The Principal Medical Officer, Special Projects, continued to serve as Chairman of the Health Communications Committee. This body includes senior representatives from Directorates of the Health Branch and ex-officio members from the departmental library, and is broadly responsible for the study of problems of communications in the health sciences of concern to the Health Branch of the Department and for the preparation and recommendation of specific action programs to meet them.

Activities of the Committee included:

- (a) Studies of the purposes and functions of health science libraries with special reference to the intramural and extramural aspects of the Department of National Health and Welfare library.
- (b) Studies on the use of automation for health communications purposes in the Department. This Committee is following closely the development of the Central Data Processing Bureau established by Treasury Board and which is expected to provide computing and data processing service to departments of the federal government during 1966.
- (c) A detailed investigation of the bibliographic use of prepared magnetic tapes, available by subscription from Chemical-Biological Activities (C. B. A. ) published by American Chemical Society, related to work conducted by the Department was also initiated.

#### Educational and Technical Information Services

##### Medical Services Journal, Canada

This organ is a professional and scientific health periodical published monthly under the joint authority of the Ministers of National Defence, National Health and Welfare and Veterans Affairs. Its primary objective is to publish as clearly and as concisely as possible papers relating to the preservation of health and the understanding of disease. It is devoted largely to the publication of papers on military medicine, clinical matters submitted by C. D. A. hospitals, as well as the publication of articles on the various public health programs of the Department of National Health and Welfare and the Provincial Health Departments. Abstracts and reviews of the medical research programs of the World Health Organization are also published from time to time in the Journal.

The Principal Medical Officer of that section continued to serve as professional editor of various departmental publications including the monthly bulletin of Canada's Health and Welfare and the Annual Report of the Department produced by Information Services.

##### Consultant and Advisory Services

This section also provided professional and technical assistance in the planning and operation of departmental programs concerned with fitness and amateur sports, smoking and health and the centennial program.



## SMOKING AND HEALTH

Progress continues in the development of the nation-wide Smoking and Health Program through which the Department of National Health and Welfare, the provincial health and education authorities, and interested voluntary and professional organizations are engaged in a co-operative effort to reduce the incidence of lung cancer and other diseases attributable to cigarette smoking.

The major activity of the year was the Canadian Youth Conference on Smoking and Health which was held in Ottawa on May 12, 13 and 14, 1965. The primary objective of the Conference was to establish a model which would assist the provincial and local health and education authorities (and possibly also youth organizations, voluntary health agencies, parent-teacher associations and other interested groups) to organize similar meetings in future. Such conferences provide opportunities to meet with young people and obtain their assistance and suggestions in the planning and implementation of programs to encourage young people to remain or become non-cigarette smokers. The 74 Conference delegates, selected provincially, were teenage girls and boys, smokers and non-smokers, representing the 10 provinces as well as the Yukon and Northwest Territories. Each province and the Territories also sent one adult representative. Special guests and officers of the Department of National Health and Welfare participated.

The Conference exceeded all expectations and opened the way to new approaches not only in health education concerning the health hazards of cigarette smoking but in other health programs directed to youth as well. Follow-up of the national Conference has been carried out in several provinces.

Pamphlets based on conclusions reached at the Conference and a report and documentary film of the Conference have been produced.

Other materials produced during the year include a nine minute, coloured, animated film dealing with the cigarette smoking habit, directed primarily to high school and university age audiences; a monthly bibliography prepared by the United States National Library of Medicine; posters; display advertisements for a monthly publication directed to high school students; exhibits and radio programs. A mailing list containing names of interested individuals and organizations was developed to allow exchanges of information and to distribute sample copies of health education materials. Reprints of smoking and health articles from medical journals, newspapers and other publications, as well as copies of pertinent speeches and reports, and pamphlets prepared by organizations such as the Canadian Cancer Society and the Canadian Tuberculosis Association were also made available.

Research programs, sponsored by the Department, are designed to provide information on the extent and nature of smoking habits in Canada and the motivational aspects of smoking. The primary purpose of this research is to obtain knowledge which may be used in health education programs.



The American Medical Association is the largest and most influential organization of the medical profession in the United States. It is a non-profit corporation, organized for the purpose of promoting the interests of the medical profession and the public. The Association is composed of members from all branches of the medical profession, including physicians, surgeons, dentists, and nurses. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three.

The American Medical Association is the largest and most influential organization of the medical profession in the United States. It is a non-profit corporation, organized for the purpose of promoting the interests of the medical profession and the public. The Association is composed of members from all branches of the medical profession, including physicians, surgeons, dentists, and nurses. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three.

The American Medical Association is the largest and most influential organization of the medical profession in the United States. It is a non-profit corporation, organized for the purpose of promoting the interests of the medical profession and the public. The Association is composed of members from all branches of the medical profession, including physicians, surgeons, dentists, and nurses. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three.

The American Medical Association is the largest and most influential organization of the medical profession in the United States. It is a non-profit corporation, organized for the purpose of promoting the interests of the medical profession and the public. The Association is composed of members from all branches of the medical profession, including physicians, surgeons, dentists, and nurses. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three.

The American Medical Association is the largest and most influential organization of the medical profession in the United States. It is a non-profit corporation, organized for the purpose of promoting the interests of the medical profession and the public. The Association is composed of members from all branches of the medical profession, including physicians, surgeons, dentists, and nurses. It is organized into a hierarchy of local, state, and national associations. The national association is the American Medical Association, which is the largest and most influential of the three.



Frances Galvon of Calgary demonstrates her display on the damaging action of the cigarette during the Canadian Youth Conference on Smoking and Health in 1965. The conference was sponsored by the Department of National Health and Welfare.



The second survey of Canadian Smoking Habits was carried out for the Department of National Health and Welfare by the Dominion Bureau of Statistics in September, 1965. This survey showed that 45% of Canadians, 20 years of age and over, (58% of men and 33% of women) were regular cigarette smokers. Three per cent of both men and women smoked cigarettes occasionally. A survey of changes in smoking habits was carried out for the Department by a private research organization. Other types of research reported or underway included studies of attitudes and habits regarding smoking among high school and university students, experiments in methods of discontinuing smoking, evaluation of smoking and health films, a survey of cigarette advertising, and a review of the literature on the psychosocial factors in cigarette smoking.

Cigarette smokers have higher death rates for diseases of the heart and arteries than non-smokers. Coronary heart disease (heart attack) was responsible for the deaths of 23,235 men and 11,202 women in Canada in 1964.

Lung cancer, for which the death rate is also much higher among cigarette smokers than non-smokers, is now the leading cause of death from cancer in Canada. There were 3,387 deaths from lung cancer in Canada in 1964. The death rates for other major lung diseases - chronic bronchitis and emphysema - which are also several times more common among cigarette smokers than non-smokers, are also increasing rapidly in Canada. One thousand two hundred and seventy-nine men and 189 women died of these diseases in 1964. In addition to being important causes of death, diseases for which cigarette smokers have an increased risk, especially heart attacks and chronic bronchitis and emphysema, are major causes of disability.

#### AEROSPACE MEDICINE

The office of Consultant, Aerospace Medicine provided a consultant and advisory service to Department of Transport, other government departments, and interested agencies on medical problems related to the health, comfort and safety of the air traveller. Aeromedical studies were initiated and advice was given in specific areas of civil aviation, namely, aircraft accident investigation, aviation environment and human factors. Liaison was continued with national and international government medical departments and agencies concerned with aerospace medical research and safety. A two week course in Aerospace Medicine was presented to Department of National Health and Welfare Medical Officers who are responsible for advising Department of Transport regional offices. The need for aerospace medical research for Canadian civil air operations continued to be studied. Environmental health studies relating to Department of Transport, Air Services, operations were continued.



## CHILD AND MATERNAL HEALTH

The broad purpose of the Child and Maternal Health Division is to promote the optimum health of mothers and children in Canada in co-operation with provincial health departments, other health agencies and professional groups. The Division continues to provide consultant services and advice by means of close liaison with provincial divisions of Maternal and Child Health and Public Health Nursing, especially, as well as other agencies, in the planning of comprehensive programs and services for mothers and children of all ages. The Division, in addition, defines desirable standards of care; assists in the technical administration of National Health Grants; develops educational materials for lay and professional use, and attempts to stimulate research and studies of present health problems and programs.

In addition to these broad areas of activity, the Division has been participating in programs involving other Departmental interests, including the Health Education Committee of the Health Services Branch, the Inter-departmental Committee on Mental Retardation, the Subcommittee on Mental Retardation and Children Services of the Mental Health Advisory Committee, the Smoking and Health Education Committee and the Food and Drug Poison Control Program. Liaison continued with other Divisions and Units within the Department including Epidemiology, Mental Health, Research Development, Nutrition, Hospital Insurance and Hospital Design. Lectures by the Medical and Nursing Consultants were given at the Civil Defence College, Arnprior, for both Emergency Health and Emergency Welfare Divisions.

Consultation and liaison are maintained with provincial health departments and voluntary agencies, universities and other bodies, through field visits, lectures, institutes and through the activities of the Maternal and Child Health Advisory Committee and its Subcommittees. During the year visits have been made to six provincial health departments by Medical Consultants. Two institutes were conducted this year by the Nursing Consultant, one in Alberta and one in Ontario, to assist with provincial staff education programs.

Liaison with voluntary and professional groups included participation at meetings and consultation with such groups as the Canadian Pediatric Society, the Canadian Medical Association, the Canadian Council on Children and Youth, a Work Shop on Cerebral Palsy of the Canadian Council on Rehabilitation, the Canadian Public Health Association, the Ontario Crippled Children Association, the Montreal Rehabilitation Institute, the Safety League of Canada and the National Conference on Family Relations. Lectures were given at Queen's University, the University of Toronto School of Hygiene, and McGill University School of Nursing.

### Maternal and Child Health Advisory Committee

The Maternal and Child Health Advisory Committee continues to provide an important channel of communication among Maternal and Child Health workers, clinicians and University Departments of Obstetrics, Pediatrics and Nursing. The wide scope of the field of Maternal and Child Health is



reflected in the broad interests of the Committee members who are concerned with the need for continued studies of Maternal and Child Health problems across the nation. The Committee held its eighth annual meeting this year; the topics discussed included: Drugs Contra-Indicated During Pregnancy, Use of Pre-Packaged Formula in Hospitals, Health Education, Formula Room Facilities, and Regional Centralization of Phenylketonuria Testing Facilities. At present, the Committee has two active Subcommittees; Standards of Care and Research.

#### Subcommittee on Standards of Care

The four working parties of the Subcommittee on Standards of Care of the Maternal and Child Health Advisory Committee met during the year and completed their assignments. A Standard of Hospital Care for Maternity and Newborn Patients will be drawn up in these four main areas of concern, Medical, Nursing, Housekeeping and Facilities. It is anticipated that within the next fiscal year a draft document will be available for review by a number of professional bodies concerned with this field.

#### Subcommittee on Research

During the year the Subcommittee reviewed 88 projects, 63 of which were recommended for support. The Subcommittee re-examined the research needs and priorities in the Maternal and Child Health field.

#### Congenital Malformations

The Expert Committee on the Occurrence of Congenital Anomalies has met a number of times. This Committee is the direct responsibility of the Child and Maternal Health Division. Its purpose has been to advise on measures which when implemented will improve the quantity, quality and availability of information on the Occurrence of Congenital Anomalies in Canada. At its sixth meeting, held in October 1965, the Committee recommended the implementation of a national surveillance system for congenital anomalies on a pilot basis. Such a surveillance system using Canadian sources would provide a base line to detect and evaluate secular trends in frequency, any sudden rise in selected anomalies, geographic differences and seasonal differences in relation to epidemics and other changes in environment. A pilot scheme, using the Physician's Notice of Birth form as source data, was initiated in the Division in January 1966, with four provinces participating. The results of the one year pilot study are to be reported to the Expert Committee and recommendations for the setting up of a national surveillance system will be made at that time.

#### Health Grants Program, Service and Research

The Division continued to give technical assistance to the Health Grant Administration in appraising projects for the utilization of Health Grants. This program provides the basis for co-ordination of Departmental information and policies and helps to make contact with the provinces practical.

In the fiscal year 1965-66, expenditures within the Child and Maternal Health Grant were in the amount of approximately \$1,431,434. Funds were



utilized for a number of programs such as provincial maternal and child health consultants, services programs, detection and follow-up of inborn errors of metabolism, home care programs, and programs to help with the assessment and supervision of specific diseases.

Approximately \$600,000 of the Public Health Research Grant was used for research in Maternal and Child Health, emphasis being placed on factors relating to the health of the mother and the newborn. Continuing studies cover such areas as genetics of childhood diseases, metabolic causes of mental retardation and respiratory and nutritional problems. Perinatal mortality studies provide information about the many factors involved in deaths occurring during this critical period.

#### Health Education Program

The Division continued its active education program in developing informational materials for lay and professional use. The extensive revision of one of the Division's major publications "The Canadian Mother and Child" has been completed. It will be produced in pocket book form. The new pamphlet on "Breast Feeding", initially prepared at the request of one of the provinces, has been completed. The recognized need to provide more information to the public on child safety resulted in the production of a color film entitled "Growing Up Safely". A bibliography on "Sex Education" was prepared for professional use.

Beyond this, the Division has had close contacts with the Directorate Committee on Health Education, which will extend into the future as efforts continue to co-ordinate and interpret more effectively the health education program of the Directorate as a whole.

#### 1964 Vital Statistics

Population statistics provide some indication of the breadth of the Division's interest and concern. In 1964, Canada's birth rate was 23.5 per 1,000 of the population; 452,915 new Canadians were born that year. About 33% or 6,468,900 of our population is under the age of 15.

#### Infant Mortality

A constant reminder of the magnitude of the task to be carried out is infant mortality experience in Canada. In 1964, Canada had 11,169 infant deaths with an infant mortality rate of 24.7 per 1,000 live births. Although our death rate has been declining over the last few decades, a dozen countries with comparable standards of living have a lower infant mortality rates than ours. About 66 per cent of infant deaths in the first year of life were in the first week of life, which highlights this critical period. The main causes of infant deaths in order of importance were, immaturity, congenital malformations, respiratory infections, asphyxia and atelectasis, and birth injury.

#### Child Mortality Rate

Progress has been made in reducing child deaths at all ages with the one to four age group benefitting most. In 1963 the mortality rate of this







These laughing children are typical of what Canadian youngsters should be. Activities of the Child and Maternal Health Division are directed toward this aim.



age group was 1.1 per 1,000 population. Since 1920, the reductions in deaths in this age group have been in the order of 86.6 per cent which has contributed most significantly to the preservation of child life and to increased life expectancy.

### Maternal Deaths

In 1964, 137 mothers died in Canada, a rate of 3 per 10,000 live births. Among causes of maternal deaths, haemorrhage and sepsis, of about equal importance, accounted for almost one-half of all maternal deaths in 1963. The decreasing number of deaths from toxemia is probably a reflection of improved prenatal care.

Our declining mortality rates for mothers and children are rough indices of our progress. Nevertheless, these gratifying reductions should in no way obscure the need for intensive efforts to reduce our mortality rates even further. There remains the equally challenging task of improving our morbidity picture. Although there are no accurate statistics on maternal morbidity, the association between maternal morbidity and complications in the newborn infant is well recognized. The Division strives to encourage organizations in the systematic registration of handicapping conditions and the collection of statistics on illnesses.

The Division will continue to promote and stimulate action to improve and co-ordinate maternal and child health services, with the ultimate objective of healthier family life in Canada.

## DENTAL HEALTH

The Division's purpose is the maintenance and improvement of the oral health of the Canadian people. It provides leadership in the development and stimulation of projects in dental public health research and education. It also furnishes consultative services, information, educational material and other assistance to provincial governments, professional organizations and to branches and divisions of the Department, including particularly Emergency Health Services and Medical Services.

The Advisory Committee on Dental Health and its subcommittees provide a valuable means of liaison between the Division, the provinces and individual members selected for appointment upon a national basis for their particular qualifications.

### Research

Information on the dental situation in Canada indicates that the general level of dental health is not satisfactory. This is most evident in the child and young adult age groups. However, there are very serious gaps in the information required for definitive planning purposes. Therefore, the Division is actively engaged in studies to identify the most critical requirements for data and in the development of plans to secure it.

An intramural project to provide data upon utilization of current treatment facilities as a measure of demand for services is in progress in the Division.

An extramural project, supported by the Public Health Research Grant, to secure data upon need will be used to test out a simplified technique for this purpose. The technique, if satisfactory, will facilitate data gathering on a national scale.

Currently, eleven extramural dental projects, of which six are new projects, have been approved for Public Health Research Grant support. Their topics demonstrate the complexity and variety of dental health problems and the widening interests of scientists engaged in dental research.

#### Consultative Services

Consultative services were supplied by direct liaison to thirty organizations and associations including provincial departments of health, universities and health-oriented bodies. At this critical period in the development of dental health activities in Canada, these personal contacts are particularly essential to establish and maintain a free exchange of information between the many interested and concerned groups.

In addition, there was a voluminous correspondence with numerous individuals and organizations seeking information and advice.

#### Health Education

The dental health education program has been directed to parents and children and is a major source in Canada of dental health educational material for teachers and health workers. This year the Division produced over 300,000 prints of revised folders, booklets and posters, including, because of renewed interest and demand, some previously discontinued posters. The Division reviewed a number of films and, acting as consultant, also supervised the technical accuracy of television spot announcements.

The material is produced in co-operation with Health Education and Information Services, the Nutrition Division, Child and Maternal Health, provincial dental divisions and voluntary agencies.

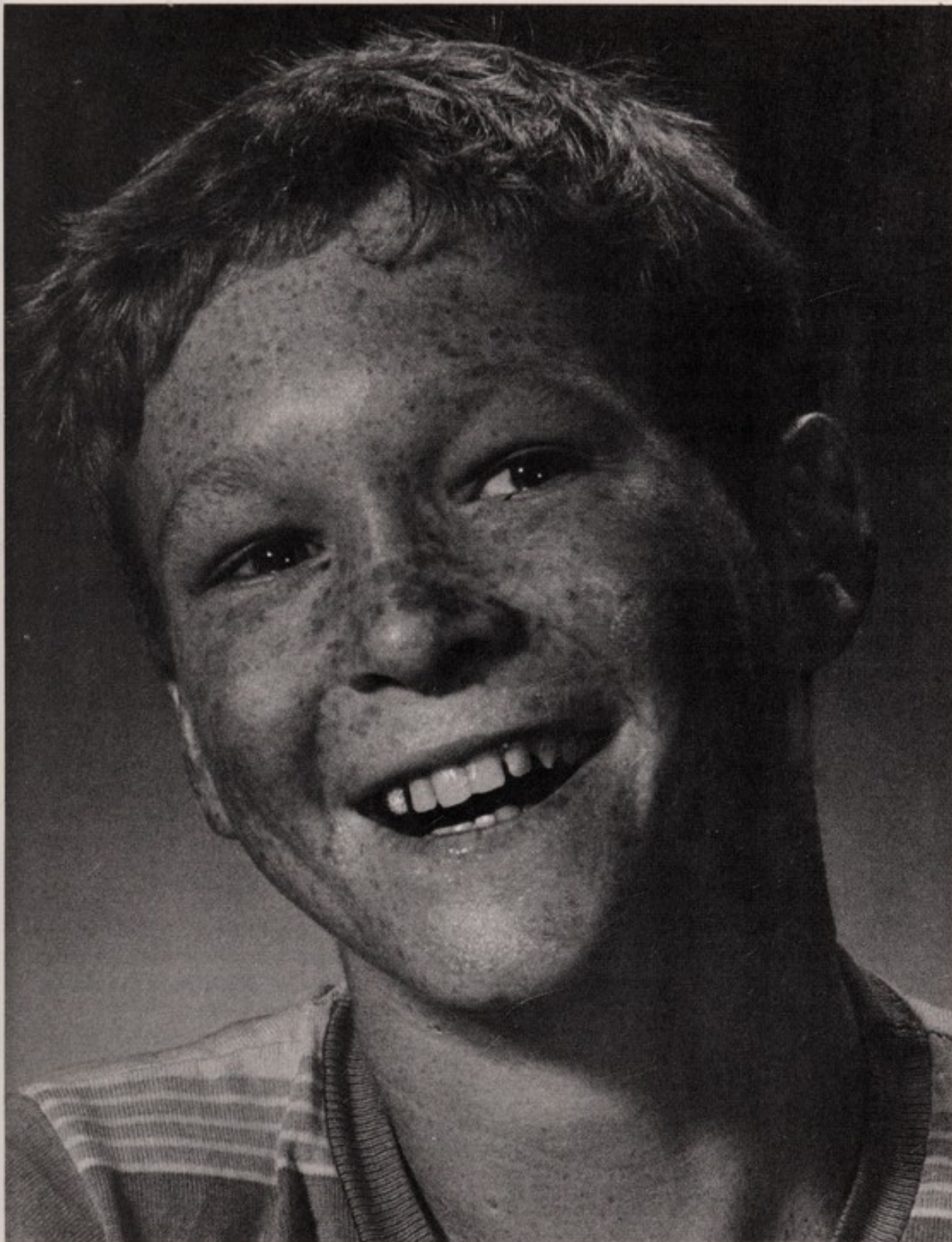
#### Emergency Health Services

The Division participated in the Working Party on a Program for Undergraduate Training in Mass Casualty Care resulting in experimental pilot programs for two dental faculties.

A bilingual instructor was provided to the Emergency Measures College instructional staff. The Division reviewed the activities of the dental profession since 1943 in Emergency Health and Civil Defence. Its findings were reported to the Emergency Health Services Advisory Committee meeting.







A smiling boy with teeth in excellent condition typifies the results of an ideal dental care program. The Department's Dental Health Division, through its educational program, hopes to encourage all Canadians, of any age, to emulate this healthy boy.



## Medical Services

The relationship of the Division of Dental Health to Medical Services is advisory. However, at headquarters an officer of the Division has some administrative duties and technical supervision over the dental program, including responsibility for making decisions concerning the approval of applications for dental treatments recommended.

### Advisory Committee on Dental Health

The Advisory Committee held its inaugural meeting in May 1965, at which time subcommittees on Dental Health Resources Development, and Statistics and Evaluation were created and the subcommittee on Dental Research, which reports directly to the Advisory Committee on Research of the Dominion Council of Health, was given additional status as a subcommittee of the Advisory Committee on Dental Health.

## EMERGENCY HEALTH SERVICES

The Emergency Health Services Division provides assistance and advice to provincial and municipal governments and to others, in connection with the planning, organization and operation of health services for an emergency in time of war or peace. The Division meets its responsibilities through six major programs.

### Continuity of Government Program

In support of this program the Division is engaged in progressive studies related to the continued operation of the Health Branch in alternative locations, should the peacetime locations be threatened. Assistance of a similar nature is being provided to provinces and municipalities.

Under this program the federal health department has now reached an advanced state of planning. Most provincial and a few municipal health departments have made good progress. However, there remains much to be done, especially by the health departments in those municipalities liable to suffer from the effects of a nuclear weapon.

### Organizational Program

Efforts towards the creation of provincial and municipal Emergency Health Services planning staffs were continued throughout the year. Eight provinces now have full time staff; the remaining two provinces have designated officers on a part-time basis and the majority have established Emergency Health Services Advisory Committees, similar to the national committee, composed of representatives from the various provincial colleges, societies and associations. With a few exceptions, less success has been experienced in inducing municipalities to appoint an Emergency Health Services Director, and further efforts to this end are continuing.

Officers of this Division participated in numerous conferences, seminars and symposia. Assistance with provincial Hospital Disaster Programs was continued throughout the year. Two hundred and eighty four hospitals have now received stockpile supplies in recognition of their satisfactory planning.

In order to assist community health units with their emergency planning, a series of special courses were conducted at Canadian Emergency Measures College, Arnprior, for the benefit of public health physicians, nurses and others in the public health team.

#### Informational and Educational Program

This program forms a major part of the total Emergency Health Services effort, and the Division continued to participate in federal committees, Defence Research Board panels, programs of national health associations and to provide assistance to provincial health associations at conventions and meetings.

Liaison was maintained with the British, United States, and North Atlantic Treaty Organization authorities in the fields of information and education.

During this period the following publications were produced:

Advanced Treatment Centre Operating Manual	(English)
Disaster Medical Care - Collected Papers	(English and French)
Bibliography Relating to Disaster Nursing	(English and French)
EHS Catalogue of Publications	(Bilingual)
Disaster Nursing Study	(English and French)
Emergency Field Sanitation	(Bilingual)
EHS Information Manuals	(English)

(for Advanced Treatment Centre,  
Casualty Collecting Units), Emergency  
Hospitals, Hospital Disaster Supplies,  
Alphabetical Listing Advanced Treatment  
Centre.

The following displays were completed:

EHS In Disaster	(English and French)
-----------------	----------------------

Continuing emphasis was placed on First Aid and Home Nursing training. More than 900 federal employees received training in First Aid or Home Nursing in 1965 through the St. John Ambulance Association Federal Government Centre, which is a part of the Emergency Health Services



Division. The overall average of federal employees trained is now 5% of the total employed.

In all, some 126,900 persons throughout Canada have been trained in First Aid and some 3,200 in Home Nursing by the St. John Ambulance Association.

The St. John Ambulance Association published a pamphlet entitled "Patient Care in the Home", which contains a complete section "Care Under Emergency Conditions". This chapter was prepared by the Nursing Section of the Emergency Health Services.

The following courses and conferences were conducted by the Division at the CEMC, Arnprior:

Public Health Planning & Operations	(English and French)
Unit Directors	(English)
EHS Health Operations	(English and French)
Nurse Educators	(English)
EHS Supplies Officer Unit Equipment	(English)
Casualty Simulation Instructors	(Bilingual)
Radiation Defence Officers	(English)
Technical Officers	(English)

The Fourth EHS Advisory Committee Meeting was held in the Brooke Claxton Building in January 1966.

The officers of the Division undertook a large number of lecture assignments to undergraduate and postgraduate professional groups.

#### Operational Planning Program

Where possible, assistance was given to provinces to extend re-entry planning and casualty care planning to provide mutual support between provinces and with the United States.

In conjunction with Emergency Welfare Services, the review of the operational procedures in target and reception areas was completed.

Work was commenced to develop a system for rapid damage analysis and receipt of information on remaining resources.

#### Resources Analysis Program

Detailed surveys of all existing health resources in Canada continue to be undertaken to provide up-to-date information on our resources in health manpower, health supplies and health installations.



One of Canada's contributions to Viet Nam was a shipment of ten emergency hospitals, sent from the Ottawa depot of the Department's Emergency Health Services Division. Crated and color-coded for easy assembly, these provided much-needed medical facilities for the Asian country.





Surveys were completed in this period on the following subjects:- Medical gases and anaesthetic agents at the manufacturing level; an essential list of pharmaceuticals; the effects of fallout radiation on X-Ray film; a pilot study of drugs at the retail level.

Further surveys are in process pertaining to pharmaceuticals at the wholesale level and sutures at the manufacturing level.

#### Health Supplies Stockpile Program

The main objective for this year was completed, that is, the procurement of all items for the 200 Emergency Hospitals, 630 Advanced Treatment Centres and 30 Blood Shadow Depots. The surplus funds within the annual ceiling of \$1,500,000.00 was applied to the purchase of 20 Public Health Laboratories and supplies for Emergency Clinics.

Arrangements were completed for the release of Casualty Collecting Units to provincial EHS authorities for use by organized First Aid teams.

Negotiations were begun with the new Canadian Government Supply Service for the transfer of certain functions, responsibilities and possibly personnel, as outlined in their pilot phase for the consolidation of government purchasing and supply.

### EPIDEMIOLOGY

The purpose of the Epidemiology Division is to assist in the control of infectious and other diseases by disease surveillance, epidemiological study, assistance in epidemics, and by supporting the development of epidemiology in Canada. Areas of special concern are briefly outlined under the following headings:

#### Disease Surveillance - Epidemiological Bulletin

The Division maintains surveillance of infectious and non-infectious diseases and disability in Canada and other countries. Many sources of information are regularly reviewed. Information of particular epidemiological interest to Canada is published in the "Epidemiological Bulletin". This is a restricted publication which provides current information to medical officers of health, public health laboratory workers and other public health practitioners.

#### Tuberculosis

New active cases of tuberculosis have declined dramatically in the last decade since the introduction of effective anti-tuberculosis drugs. The



number of new active cases reported declined from 9,122 in 1954 to 4,541 in 1964. Tuberculosis deaths also dropped from 1,593 in 1954 to 670 in 1964. The disease remains a considerable problem in all provinces. The Division, in addition to surveillance and epidemiological studies, reviews applications for Tuberculosis Control Grants, and provides a consultant service. The Third National Tuberculosis Conference was held in February 1966, in association with the Canadian Tuberculosis Association. Its purpose was to review and appraise tuberculosis programs.

#### Venereal Disease

Reported syphilis in Canada showed a rising trend from 1958 to 1963, and since then has declined. Reported gonorrhea has shown a somewhat similar pattern. Venereal disease is known to be under-reported, and declining trends may not reflect the real situation.

The Department assists provincial departments of health in venereal disease control chiefly through health grants, and by providing educational materials. The Division reprinted the new booklet "Confidentially... to Teenagers", and revised the publications "Venereal Disease - What You Should Know" for lay use, and "Syphilis and Gonorrhea" for physicians. In addition, the annual statistical report on venereal disease was prepared for distribution to medical officers of health, and to others on request.

#### Accidents

Accidents are the leading cause of death in every 5 year age group between 1 and 39 years. They are the third leading cause of death for all age groups combined, being surpassed only by heart disease and cancer. Traffic accidents are responsible for the greatest portion of all accident fatalities. Of the 10,564 accident deaths in 1964, 4,862 or 46% were due to motor vehicle accidents.

The Department gives grants to the Canadian Highway Safety Council, and supports the Traffic Injury Research Foundation of Canada. The chief function of the Safety Council is to promote traffic safety education. The primary purpose of the Research Foundation is to stimulate and co-ordinate research into the medical aspects of traffic accidents. The Division studies accident statistics to determine the nature and causation of injury, and to pinpoint susceptible groups involved. In addition, liaison is maintained with other groups concerned with accident prevention, and consultation provided as necessary.

#### Study of Smoking and Health

A Canadian Study of Smoking and Health covered Department of Veterans Affairs pensioners in the period July 1, 1956 to June 30, 1962. Special tabulations were made for the Surgeon General's Advisory Committee on Smoking and Health, United States Public Health Service. Final tabulations were completed and analyzed during the year, and it is planned that the final report will be released by mid-1966.

## Study of the Course of Disease in Chronic Bronchitis Cases

A study was done during the year to elucidate causal factors in chronic chest disease among Department of Veterans Affairs pensioners. Statistical analysis was conducted, and a report is in preparation.

## Studies of Local Health Services

In 1963 the Division assisted the Canadian Public Health Association in a co-operative study of functions and activities of all public health personnel in two large health units. Data processing was postponed to permit extension of the study to include nurses in four additional health units; this has been completed, and a report prepared. Analysis of data in the original two health units is now under way.

Preparations were made for a Federal/Provincial Conference on Local Health Services.

## Advisory Committee on Epidemiology

The Advisory Committee on Epidemiology was established in 1962. Membership includes epidemiologists from provincial departments of health, and other consultants. The purpose of the Committee is to advise on matters relating to the study and control of communicable and non-communicable diseases including chronic illness, and to assist in development of the most effective epidemiological services for the benefit of the country as a whole. The Committee meets regularly and reports to the Dominion Council of Health. The last meeting was held in December 1965.

## National Advisory Committee on Immunizing Agents

The National Advisory Committee on Immunizing Agents was established in 1964, to advise and make recommendations on immunizing agents to the Minister through the Dominion Council of Health. The Committee

held its third meeting in September at which it considered immunizing agents commonly used in Canada, measles vaccines, and indicated aspects of special interest for further study.

## National Health Grants

As part of its consultant service, the Division reviews applications for National Health Grants respecting tuberculosis, venereal disease, local health services and epidemiological research projects, and undertakes associated field visits.







The Epidemiology Division conducted a department-wide Asian Flu<sup>1</sup> immunization demonstrating different types of injection. Here an employee is being injected by a portable jet gun injector.



## HEALTH FACILITIES DESIGN

The establishment of Health Resources Fund during the year had a broadening effect on the division's field of influence, hence the change in the division's name from Hospital Design to Health Facilities Design.

To cope with the increasing demands for consultations in architectural and engineering fields of widely varying building programs, the division has added consultants in architecture and electrical engineering to its present staff.

### Information and Research

The division has studied and made available information on design of hospitals and other related facilities and equipment through various media:

Papers and Seminars were given by division members to Manitoba Hospital Association, Power Engineers in Toronto, Ontario Hospital Association, Manitoba Association of Architects, American Association for Contamination Control in Houston, Texas, Health Services of Department of National Health and Welfare, Canadian Nurses Association - Standards Committee, British Columbia Association of Architects, American College of Hospital Administration.

Preparation for seminar on Hospital Costs to be held in April 1966-67 were completed.

Special Planning solutions were developed for various hospital and nurses residence projects as well as study plans and presentation material for Emergency Health Services and American College of Hospital Administrators' seminar.

Canadian Building Standards and Guide Material for Hospitals and Health Facilities continued to be in the forefront of the division's efforts. Cost study in connection with General Conditions No. 6, Hospital Food Service, was produced. General Conditions, Nos. 10 and 11, Electrical, Transportation and Communication Systems were started. General Conditions No. 5, Fire Safety Requirements, draft received final comments. Part III - Long-Term Active Treatment Hospitals, French version, will be published shortly.

Research planning on the microbiological and economic aspects of operating room air conditioning systems was carried out through the year, the project steering committee being chaired by a member of the division. Further investigation of potential research projects concerning the use of carpets in hospitals, clothing for use in the surgical suites and critical areas, laundry chutes, and air pattern behaviour in the immediate vicinity of the surgical site was continued through the year.

Education. Preparations for a course on environmental aspects of health facilities planning were started. The course will be given by this division in the autumn 1966-67.

The division chief gave a half day's lecture to graduate students of hospital administration at the University of Toronto and the University of Ottawa.

**Liaison consultation.** Continuation of the consulting and advisory service to provincial and territorial hospital organizations, as well as private consulting architects and engineers, was maintained both in the field and at head office, with approximately 60 consultations given.

Members of the division have continued to serve in various capacities on committees of the Canadian Standards Association, the Medical Research Council, the National Building Code of Canada and the Canadian Government Specifications Board, Technical Committee of American Society of Heating, Refrigerating and Air Conditioning Engineers.

#### Hospital Construction Grant Approvals

Since the beginning of this program in 1948, the division has reviewed and studied construction or renovation projects submitted for grant purposes, and has recommended grant assistance as indicated below:

TABLE 8

#### HOSPITAL CONSTRUCTION GRANT APPROVALS SINCE 1948

	1948-66	1965-66
Total grants approved for construction and renovation	\$239,567,198	\$13,062,907
Patients' beds of all types approved for grant purposes	122,176	5,161
Newborn bassinets approved for grant purposes	15,359	458
Bed equivalent areas (diagnostic services) approved for grant purposes	23,484.1	1,387.9 (1)
Nurses' beds (residence) approved for grant purposes	23,355	800
Internes' beds (residence) approved for grant purposes	917	--
Net grants approved for renovations	\$ 26,642,660	\$ 3,635,542

(1) A bed equivalent area has been assumed to be a unit of 300 square feet.



## LABORATORY OF HYGIENE

The Laboratory of Hygiene is, in effect, a complex of laboratories providing technical and consultative services in the fields of bacteriology, virology, immunology, parasitology and clinical chemistry to provincial departments of health, hospitals, research institutions and other government departments. The Laboratory also plays a special role in the control of "biological" drugs. Co-ordination of effort between Provincial and Federal Departments of Health is maintained through the Technical Advisory Committee on Public Health Laboratory Services and the Dominion Council of Health.

### Bacteriological Laboratories

**Enteric Bacteriology** - These Laboratories which serve as Canada's National Enteric Reference Centre received 2,375 specimens for identification during the year. Of these, 1,069 were identified as *Salmonellae* (typhoid-food poisoning group), 412 as *Shigellae* (dysentery group), 570 as pathogenic *E. coli* (infantile gastroenteritis group) and the rest (310) as belonging to other nonpathogenic species.

Eight *Salmonella* serotypes not previously reported in Canada were identified. *S. ibadan*, *S. taksony* and *S. uganda* were isolated from human cases of infection and *S. essen* from garter snakes, while the water from the tanks in which pet turtles were being kept proved a prolific source of these "new" types to Canada, *S. carrau*, *S. hillbron*, *S. oslo* and *S. taunton* being isolated from this source.

*S. typhimurium* was the *Salmonella* most often responsible for salmonellosis in man and was also the most frequently isolated serotype from animals and poultry. The other serotypes most frequently associated with illness in man were *S. newport*, *S. heidelberg* and *S. thompson*.

In human shigellosis, *Sh. sonnei* was, by far, the most common aetiological agent, followed by *Sh. flexneri* 2 and *Sh. flexneri* 3. Among the enteropathogenic *E. coli*, 026:B6 and 0119:B14 were the predominant serotypes.

As a service to the provinces, this Laboratory prepared and distributed more than 374 litres of standardized antigens for Widal tests and 3,681 ml. of diagnostic antisera.

In collaboration with the Research and Statistics Division a data processing card was developed for reporting and recording information on salmonella isolates, which it is hoped will facilitate and stimulate the reporting of epidemiologic and other information about salmonellosis.

**Staphylococcus Phage Typing** - The National Staphylococcus Phage Typing Reference Centre received 4,993 cultures for typing during the year and distributed 180 phages and 197 propagating strains to 9 laboratories in 6 provinces and 2 foreign countries.



During the year, 6 provincial public health laboratories collaborated with this National Centre in an international survey of phage typing performance. On the whole, the results of the comparative tests showed a high degree of uniformity among participating laboratories. This is particularly encouraging since the typing phages had been propagated in different laboratories in Canada.

This Laboratory has collaborated with several outside agencies involved in studies of staphylococcus infections. One of these was a study of staphylococci recovered from diseases in dogs, using canine phages provided by Dr. H. E. Coles of Kansas State University.

Other bacterial groups - A total of 779 cultures of streptococci were received for serological identification during the year. This Laboratory is the only laboratory in the country which carries out the serotyping of Group A streptococci. Although many of these were received as part of an international survey, a considerable number were obtained from persons with scarlet fever or with glomerulonephritis following streptococcal infection. During the year, this Laboratory prepared and distributed to provincial laboratories 688 ml. of streptococcus diagnostic antisera and provided a number of stock cultures to provincial laboratories and other organizations. The number of strains of C. diphtheriae submitted for typing was not as large as in the previous year; 66 strains were received for typing. Most of these came from Western Canada where diphtheria continues to be a problem in certain areas.

Special investigations - Methods were developed for large scale production of bacterial surface and flagellar antigens, which will permit considerable savings in time of personnel required to produce these diagnostic reagents. Studies of the production of E. coli antibodies were continued. It was found that rabbits injected via the foot pad with antigens suspended in complete Freund's adjuvant, first produced antibody in the macroglobulin form, but, after a month, produced antibody in the gammaglobulin fraction. These findings are of value in developing a rational approach to the production of fluorescent antisera for diagnostic purposes.

#### Biologics Control Laboratories

The Laboratory of Hygiene has the responsibility of controlling biological drugs (vaccines, toxoids, sera, antibiotics) to be sold in Canada, under the Canadian Food and Drugs Act and, as the National Public Health Laboratory, the further responsibility of seeking to advance the proper use of these agents. In the control work, analytical analyses are carried out on a large number of biological drugs. Establishments manufacturing "biologics" are inspected in order to ensure that their standards for staff and performance meet Canadian requirements and a considerable amount of research into control test methods is constantly being carried out. The public health projects include research into new vaccines and field testing.

Control: Antibiotics - Antibiotic preparations tested include both the "licensed" products, i. e. the injectables, and the non-licensed which include capsules, tablets, troches, lozenges, ointments, syrups, sprays, dental



pastes, sensitivity test discs, and others. A total of 1,373 specimens, involving over 6,000 tests, were received and examined during the year. Of 574 specimens of antibiotic discs, 36 were found unsatisfactory. Of the other specimens, 29 were found unsatisfactory and were either not released or were withdrawn from the Canadian market. The Tetracycline products of 2 manufacturers were found to contain the toxic breakdown product, epianhydrotetracycline. These manufacturers were required to withdraw their products from the market and to make drastic changes in their manufacturing procedures.

Other "biologics" - Tests for identity, safety, pyrogens, potency and sterility were carried out routinely on all licensed preparations. In addition, pyrogen tests were carried out on a large number of non-licensed drugs. A total of 754 lots of various drugs (vaccines, toxoids, antitoxins, intravenous solutions, immune globulins, disposable needles, etc.) were tested during the year. Of these, 166 specimens failed to meet the required tests. Included in the latter was a special survey of disposable needles and syringes. Samples were received from 196 lots. Sterility tests were performed on 2,336 specimens, and some 4,880 were examined for proper packaging. Only 3 needles were found to be contaminated, but the packaging of 154 lots was such that sterility could not be guaranteed, and the distributor removed all lots from the market.

Inspection and Review - As part of the control of "biologics", inspections were carried out of 60 manufacturing establishments. This included 8 new applications from manufacturers for a Canadian licence, of which 6 were granted and 2 refused. Three manufacturers were required to carry out major changes in order to maintain their licence. During the year, 46 new drug submissions pertaining to new antibiotics or new combinations of drugs containing antibiotics were reviewed. Seven new antibiotics were released for use.

Research - Research to isolate the fractions in pertussis vaccine which are responsible for conferring immunity was actively continued. By using fractionation techniques it was possible to separate the antigenic fractions from toxic fractions. This could prove to be a major breakthrough in our studies. Research towards the development of new vaccines has continued to be very active. A rather low incidence of cerebro-spinal meningitis in the Haute Volta, Africa, resulted in postponement of the large field trial of the Laboratory of Hygiene meningococcus vaccine planned for 1965-66 at the specific request of W.H.O. A lysed spheroplast vaccine has been developed against *E. coli* which possesses good immunogenic activity and low toxicity. The vaccine, however, appears to be type specific. Studies are now being directed to the development of a vaccine which will protect against a number of different enteropathogenic serotypes. With gonorrhea again a problem of major public health concern, the Laboratory is attempting to develop a good gonococcus vaccine. One lot of experimental vaccine is now undergoing clinical trial in the field.

A bentonite flocculation test for *M. tuberculosis* antibodies in serum was developed, which appears to have useful diagnostic potentialities.



Collaboration with W. H. O. - Collaborative assays were carried out with W. H. O. and the Medical Research Council (U. K. ) on tylosin, hygromycin, gramicidin, and cycloserine. The Laboratory is represented on W. H. O. panels for the control of biological preparations and antibiotics. This collaboration entailed participation at 'expert' meetings in Geneva and in reviewing proposed requirements for various drugs.

### Clinical Laboratories

The chief activities of these Laboratories are in the fields of syphilis serology, blood group serology and clinical chemistry.

Syphilis Serology - This Laboratory serves as the National Reference Centre for syphilis serology and a program has been designed to attain uniformity of test procedures in all parts of Canada. Reagents are prepared, standardized and distributed to all provincial public health laboratories. Evaluation of performance studies are conducted every second year in which all 10 provincial laboratories participate, and senior personnel from the provinces come to this Laboratory for refresher training.

During the year, 68 litres of carefully standardized syphilis serological diagnostic reagents were distributed to the provincial laboratories.

The Treponema Pallidum Immobilization (TPI) test - highly specific for syphilis - was performed on 1,110 specimens from individuals presenting a problem in the diagnosis of syphilis. This difficult test is performed by only two laboratories in Canada.

Special studies were continued of the Fluorescent Treponemal Antibody (FTA) test and a recent modification, the FTA - Absorption Test. This Laboratory is investigating the claim that this test is as specific as the TPI test and is more sensitive.

The twelfth evaluation of performance of serodiagnostic tests for syphilis in provincial laboratories was completed during the year and the results have been compiled and distributed to the participants. The high standard of work performed by all the provincial laboratories has once more been demonstrated.

Blood Group Serology - Efforts have been directed primarily towards the drawing up of Canadian specifications or minimal requirements for blood transfusion reagents sold in Canada. In a survey of commercial reagents conducted during the year, several products from different sources fell short of what are considered to be reasonable standards.

Clinical Chemistry - The main objectives of this unit are: (a) To assist hospital laboratories, especially the smaller ones, in improving quality of performance by offering a manual of reliable procedures in clinical chemistry and by providing a standard preparation for the determination of hemoglobin, (b) To evaluate some of the many reagents, sets, kits and devices offered on the market for use in clinical laboratories; (c) To conduct a program of research directed in general terms towards the early detection of disease,



especially chronic disease, and (d) To provide laboratory services for nutritional surveys of various populations (Eskimos, the elderly, etc).

A total of 2,444 copies of the Laboratory of Hygiene "Manual of Clinical Chemistry for Hospital Laboratories" in the English language have been distributed to 580 hospital laboratories and 366 French copies to 116 laboratories. Methods for the determination of transaminases are now ready for inclusion in these manuals.

Standard cyanmethemoglobin solutions for use in the estimation of hemoglobin were prepared and distributed to 735 hospital and public health laboratories during the year.

The evaluation of diagnostic sets, kits and devices designed to simplify analytical procedures was continued. Further evaluation studies of "new, improved urograph", a paper strip impregnated with reagents for the determination of blood urea nitrogen, were carried out on 100 serum specimens. Studies of "Dextrostix", for the rapid determination of blood glucose, were completed and a paper prepared for publication. The following kits for the determination of cholesterol were evaluated: Stanbio ECR, Chole-Tech, USS Lab. Cholesto-Test Reagent, Harleco Set, Hycel Cholesterol Reagent, La Mar Cho La Mar Test Set, Hyland Cholesterol Test, Medi-Chem Cholesterol Determination Set and Hopper's Poly-Re-Sol Reagents. In comparative analyses, 30-40 serum specimens were examined by each kit. Further checking of various lots of commercial control sera was carried out to provide long-term data on the stability of various constituents.

The following research projects were studied during the year: (a) The investigation of amino acid patterns in the serum and urine of patients with suspected amino acid abnormalities (cystinuria, Fanconi syndrome, etc.) using the Amino Acid (automated) Analyser. (b) The isolation and purification of antibody from goat milk serum following infection of the goat udder by influenza virus, in collaboration with the Research Division of the Ottawa Civic Hospital. (c) Protein patterns in the serum of individuals with confirmed or suspected sarcoidosis - at the specific request of the Epidemiology Division. In contrast to reports in the literature that gammaglobulin is increased in sarcoidosis, the finer resolution obtained by cellulose acetate indicates the increase is in the beta 2- globulin fraction. (d) Protein patterns in the serum of Eskimos from different regions of the Canadian North with abnormal total protein values. These examinations were part of a survey of the nutritional status of the Eskimo carried out by the Divisions of Nutrition and Northern Health.

The clinical nutrition laboratory continued to provide laboratory services to the Nutrition Division, and to offer such services to hospital and public health laboratories. Over 6,000 analyses were carried out by this laboratory during the year, and involved studies, amongst others, of the incidence of carotemia in mentally retarded children in New Westminster, B.C., and of the nutritional status of a group of elderly persons in the University of Manitoba "Meals on Wheels" project.



## Virus Laboratories

These Laboratories are responsible under the Food and Drugs Act for the technical control of virus vaccines and immune sera used in the prophylaxis and treatment of virus diseases in man. They also serve as the National Reference Centre for the laboratory identification of viruses pathogenic to man. A highlight of the past year was the completion of the construction of an extension to the Virus Laboratories, providing an additional 10,000 square feet of laboratory space. This extension is expected to be ready for occupancy early in the new fiscal year (1966-67).

**Virus Vaccine Control** - Active control of virus vaccines, offered for sale on the Canadian market, was continued. Twenty-six lots of Salk Polio vaccines, 7 lots of Sabin (live) Polio vaccines, 11 lots of measles (live) vaccines, one Yellow Fever vaccine, 5 lots of influenza virus vaccines, and 21 lots of smallpox vaccines were submitted for examination, and all but one of these (one lot of influenza vaccine) were found satisfactory and released for sale. In addition, 8 lots of immune serum globulins, submitted by American and European manufacturers, were tested; 6 were found satisfactory and released for use in Canada. Although all the smallpox vaccines tested were found to meet the Canadian requirements, most would not meet the new International requirements issued by W.H.O. However, by January 1967, all Canadian smallpox vaccines will be required to meet W.H.O. International standards.

The field trial of live, attenuated measles vaccines reported in last year's annual report was extended to the testing of the sera of a number of the vaccinated children 8 months after vaccination and, in all cases, the antibody levels had been well maintained. A further trial of attenuated measles vaccine was carried out in Frobisher Bay, N.W.T., in Eskimo children and again adverse reactions were minimal and antibody response was satisfactory. In preparation for the control of rubella (German measles) vaccine, likely to be developed in the near future, two new types of neutralization tests were introduced in the control and diagnostic procedures.

Studies on genetic markers of polio virus strains, isolated from persons with various clinical symptoms were continued. Nineteen strains were tested and found to be "vaccine-like".

**Reference Centre activities** - The Diagnostic and Reference Section received more than 600 specimens of human origin during the year and carried out more than 1,750 tests in chick embryos, 2,000 tests in laboratory animals and 100,000 tests in tissue culture to establish the identity of the virus isolates. Several outbreaks of meningoencephalitis occurring in the Western Provinces were investigated and some were found to be associated with Coxsackie viruses types A9 and B, and others with Echo viruses, mainly type 6. Western equine encephalomyelitis (WEE) virus was identified in specimens from a number of cases occurring in Saskatchewan. Some recent outbreaks of respiratory infections were found to be associated with influenza virus type A2 and adeno viruses. Lymphocytic choriomeningitis virus was identified in a very unusual case of profound encephalomyelitis in a young adult in Ontario. A study of an outbreak of infectious hepatitis, associated



with Coxsackie A10 virus isolations, was carried out in collaboration with the Department of Bacteriology of Dalhousie University, Halifax.

The preparation of viral diagnostic reagents increased during the year, with antigens for over 27,000 tests and antisera for over 8,000 control tests being distributed to the Provincial Laboratories. A new, highly specific diagnostic Complement-Fixation antigen, rendered non-infectious by gamma-irradiation for the serodiagnosis of WEE, was developed by these Laboratories and made available to the Provincial Laboratories.

Collaboration with W. H. O. - A program of collaboration with W. H. O. for the lyophilization, standardization and distribution of adeno-, entero- and parainfluenza virus antisera for use as International reference standards was continued. A study of the storage stability of such reference sera was carried out and the results published in the scientific press. The monthly collection of data on viruses identified in Canadian laboratories was continued and these reports forwarded to W. H. O.

Cytology - The Cytological section continued to analyse systematically, for chromosomal makeup and sensitivity to viruses, all tissue culture cell lines used in the Virus Laboratories.

Four new cell lines derived from African green monkey kidney tissues and three cell lines from rhesus monkey kidney were established during the year. Studies on the effect of storage of cell lines at low temperatures were continued. A program of testing all tissue cultures and viral reagents for the presence of mycoplasma (a common contaminant) was introduced, and a study of the effect of mycoplasma on the chromosomal constitution of cell cultures was initiated.

Zoonoses Laboratories - The principal function of these laboratories is to study the distribution and assess the importance in Canada of the more commonly considered "exotic" diseases, such as Rocky Mountain Spotted Fever, Q Fever, Colorado Tick Fever and California Encephalitis, transmissible from animals to man.

During the year, assistance was given to the provinces of Alberta and Saskatchewan in studies of western equine encephalomyelitis (WEE). More than 36,000 mosquitoes were received for examination. To date, 237 lots have been tested, 7 of which have proved positive for virus. One of the strains of virus isolated has been identified as WEE virus, 2 others have been shown not to be WEE virus or viruses recognized as occurring in mosquitoes in Western Canada.

A survey of Colorado Tick Fever virus in wood ticks in Southern British Columbia revealed that 7 of 12 lots processed were positive for this virus. This high incidence of tick infection suggests that the disease is common in nature and may be of importance in public health in this area.

An *in vitro* test to detect antibody to California Encephalitis virus has been developed and a start has been made, using human sera from hospitals in the Ottawa area, to study the public health importance of this disease.



The public health importance of Q Fever is being studied using a group of people from the Picton-Toronto area, selected because of exposure to known Q Fever positive herds, and a non-select group (general population) living in the same general area. The sera from the individuals in these groups are being tested by the radioisotope and capillary tube agglutination tests. Preliminary results to date indicate that about 40% of the select group are seropositive; (tests have not yet been made of the sera of the non-select group).

A survey of Southern Ontario Indian Reserves indicates a high incidence of Spotted Fever rickettsial infection in ticks, with 47 lots positive of 62 examined. A lower incidence of this micro-organism was noted in British Columbia, with 11 of 21 lots positive. The organisms from the two provinces behave similarly in guinea pigs, neither producing clinical disease. Such organisms are referred to as "immunizing strains". Special attention is being given to the isolation of rickettsiae from ticks of both provinces for further study. One of the two strains of rickettsiae isolated by these laboratories in 1963 in Richmond, Ontario has been positively identified as Rickettsia rickettsii, the etiologic agent of Rocky Mountain Spotted Fever, while the other has been recently identified by the Rocky Mountain Laboratory, Hamilton, Montana, as Rickettsia mooseri, the etiologic agent of endemic typhus. This is the first evidence of the existence of typhus in nature in Canada.

The study of tularemia in ticks on Indian Reserves in Ontario was continued with special attention being given to ascertaining the principal rodent hosts of the vector ticks and to discovering their role in maintaining the tularemia focus. From the sera of small rodents collected at Muncey, Ontario, 8 isolations of the causative agent of tularemia were obtained. Studies of these show that they are moderately virulent, typical of the water-rodent type. No isolations, however, of the organism were obtained from streams and wells in the area.

Following the demonstration that ticks on Southern Ontario Indian Reserves were carriers of diseases transmissible to man, Indian Affairs Branch requested that this Laboratory conduct experiments to find practical methods of controlling these tick populations. In 1965, a 15-acre tick-infested field was laid out in plots to test the effect of field crop cultivation as a control measure. Results of this experiment will not be known until 1967.

This Laboratory continued to provide provincial public health laboratories with standardized diagnostic reagents to assist them in identifying certain zoonotic agents. The volume of diagnostic antigens distributed during the year, when diluted for use, was in excess of 176,000 ml.

## Parasitology

The Institute of Parasitology, Macdonald College, and Dr. T. W. M. Cameron, McGill University, by special arrangement with the Laboratory of Hygiene, continued to provide technical and consultant services to provincial public health laboratories and to various federal departments.



group of people... in the... of the... group... in the... of the... group... in the... of the... group...

A survey of... in the... of the... group... in the... of the... group... in the... of the... group...

... in the... of the... group... in the... of the... group... in the... of the... group...

... in the... of the... group... in the... of the... group... in the... of the... group...



Inoculation of eggs is one of the steps in the technical control of viral vaccines, such as poliomyelitis, influenza and other vaccines. Tests are made in the Virus Laboratories for safety and potency of these immunizing agents.



During the year, 518 stool specimens were received and examined for parasites. Complement-fixation tests for hydatid disease were carried out on 15 referred specimens, of which only 1 was positive and agglutination and precipitation tests for trichinosis were performed on 161 referred specimens, of which 34 (21%) were positive by both tests and 50 (31%) were positive by only one of the tests.

Also during the year, 605 ampoules (523 of Canadian antigen and 82 of Australian antigen) of hydatid antigen for the Casoni test were distributed to hospital and public health laboratories.

The collaborative investigation, with the Saskatchewan Department of Health and the Indian Health Services Division of the Department, of amoebiasis in the Loon Lake area of Saskatchewan, referred to in last year's annual report, was continued during 1965. Of 118 individuals of all ages in the Loon Lake, Ministikwan and Bighead Reserves examined, 47.4% were found to be infected with parasites, 20.3% with Entamoeba histolytica. The over-all infection with this latter parasite had decreased from 31% in 1964 to 20% in 1965. There was a decline in infection rates in those under 20 years of age and an increase in those 20 and over. The E. histolytica infection rate, however, of the white population in Loon Lake town was only 3.3% (of 149 persons examined). Thus it appears that the outbreak of amoebiasis among the Indians on the Reserves had not affected the white population of the area.

In co-operation with Dr. J. H. Rooks, Northern Health Services, Inuvik, a skin test survey, for hydatid disease, of the Northwest Territories has been started, for the purpose of determining the incidence of hydatid disease in this region and to test the effectiveness of hydatid fluids from different sources (reindeer, elk, moose, human and Australian sheep) in the Casoni test.

Parasitological material suitable for technician training courses have been supplied, on request, and two courses of 80 teaching hours each were given, during the year, to a number of Army officers about to undertake overseas service and 4 graduate bacteriologists.

## MEDICAL REHABILITATION

The Medical Rehabilitation Division provides a national consulting and co-ordinating service in the field of Medical Rehabilitation and Blindness Control. It also provides advisory services under the Disabled Persons Allowances Program and is responsible for the determination of medical entitlement to Blind Persons Allowances under the Blind Persons Act and Regulations. In collaboration with the provincial authorities it administers a treatment plan for the restoration of vision for recipients of Blind Persons Allowances. The Division is also consulted on problems related to the fields of Aging and Chronic Diseases and on medical questions related to the disability pensions of the Canada Pension Plan.



The transfer of Prosthetic Services from the Department of Veterans Affairs to the Department of National Health and Welfare under PC1965-218, added a new area of activity, and the Division assumed operational responsibility for this service on January 1, 1966.

#### Medical Rehabilitation

The primary aim of this section is to stimulate, encourage and assist provincial health departments in planning and developing balanced programs with the ultimate objective of making rehabilitation facilities and services available to every disabled individual in Canada who may benefit from treatment.

Advice has been provided on various aspects of medical rehabilitation programs to hospitals, rehabilitation centres, specialized clinics, universities, voluntary organizations and public health and welfare departments at the various levels of government - local, provincial and federal.

The Division continued to work with the Civilian Rehabilitation Branch of the Department of Labour on its program for the vocational rehabilitation of disabled persons, carried out through nine provincial agreements under the relevant act. Among other features, the Vocational Rehabilitation of Disabled Persons Act provides for cost sharing agreements with the provinces to purchase comprehensive rehabilitation services for disabled persons who may become capable of pursuing a substantially gainful occupation, or to dispense with the regular home service of an attendant. These provisions complement those of the Medical Rehabilitation and Crippled Children Grant which is used to assist in the establishment and development of rehabilitation facilities and in the provision of services to children and those adults not within the terms of reference of the Vocational Rehabilitation Act.

The Division's Chief participated in the work of the National Advisory Council on the Rehabilitation of Disabled Persons as the Department's representative.

During the year, the Division's staff played an active role within and beyond the Department in conferences, seminars and committees concerned with a variety of subjects to which medical rehabilitation is relevant, e. g. the role of medical rehabilitation in mental health and mental retardation, home-care, aging, and training standards.

The work of the consultants included technical appraisal and advice on projects under the Health Grants program particularly projects submitted under the Medical Rehabilitation and Crippled Children Grant. Advice has been provided on projects for the establishment and/or operation of facilities for the treatment and rehabilitation of disabled persons of all ages; on projects related to the training of medical and paramedical members of the rehabilitation team; and finally, on research projects in the field of medical rehabilitation.

In 1965-66, financial assistance to research projects was provided under the Public Health Research Grant while the major part of the assist-



ance for services and training projects was made under the Medical Rehabilitation and Crippled Children Grant. Under this Grant, after transfers, \$2,749,188 was made available to the provinces during 1965-66.

Ninety-five point six per cent<sup>1</sup> of this amount was approved in 1965-66 compared to 93% in the previous fiscal year. In 1965-66, 79.6%<sup>1</sup> of the money approved was for the development and/or operation of facilities while 20.4%<sup>1</sup> was devoted to assistance to training schools and to student bursaries in the fields of physiotherapy, occupational therapy, speech therapy, audiology and other rehabilitation disciplines.

The Expert Committee on the Habilitation of Congenital Anomalies Associated with Thalidomide recommended two years ago the establishment and development of centres for training and research in the prosthetic problems presented by deformities of this type. An increase of \$200,000 in the Medical Rehabilitation and Crippled Children Grant was made in 1964-65 specifically to provide funds for the development and continuing support of regional centres for research into new methods in prosthetics and orthotics and the training of personnel in these fields. In 1965-66, this amount was transferred to the Public Health Research Grant. Three centres have been established and are now in operation in Montreal, Toronto and Winnipeg.

Consultant services were also provided for the production of informational material. Three pamphlets dealing with "Opportunities for Physiotherapists", "Occupational Therapists" and "Speech Therapists in Canada" continued to receive wide distribution in French and English. During 1965, revisions and printing of two of these pamphlets were completed and revision of the third one is well under way. Advisory services were provided for the production of other health education material.

Visitors from other countries were welcomed and assistance was given in planning or conducting study tours on their behalf.

<sup>1</sup>Tentative figures as of April 8th, 1966.

#### Blindness Control Section

Liaison was maintained with hospitals, specialized clinics, universities, professional bodies and voluntary organizations in the ophthalmological field.

The Division continued to provide consultant services to the Health Grants program in the field of ophthalmology. In 1965-66, services such as glaucoma clinics, tonometer testing stations, retinal detachment clinics, orthoptic clinics and strabismus centers, low visual acuity clinics, ophthalmology clinics and eye banks received assistance under the Health Grants. Training of technical personnel in the ophthalmological field also received support. Basic and clinical research directed at some of the main causes of blindness were assisted during the year. Included were studies of glaucoma, pathological myopia, developmental anomalies in the newborn, ocular complications of diabetes, amblyopia, color blindness and problems associated with corneal grafting. More than \$400,000 in assistance was approved in the fiscal year 1965-66 for these ophthalmological projects.



The section has continued to review eye examination reports to determine medical eligibility of applicants for Blind Persons Allowances for all of Canada. A total of 1,302 eye reports and some 6,619 reports from provincial field workers were reviewed by the Division in the determination process. The section kept the roster of examining oculists at the required strength and maintained the records through which the fees of the examining oculists were paid. On March 31, 1966, there were 8,149 recipients of Blindness Allowance compared to 8,586 one year earlier.

The analysis of causes of blindness among persons granted the allowance for each fiscal year has been continued. Figures for this year's group of 676 reveal congenital and developmental conditions and cataracts as the two leading categories of disease causing blindness. Glaucoma some years ago was reported as responsible for eleven to twelve percent of blindness. The experience in recent years with Blindness Allowance Recipients gives support to the belief that glaucoma control measures are taking effect.

Number and percentage distribution of new Blindness Allowance Recipients, April 1, 1965 to March 31, 1966, by diagnostic groups.

<u>Diagnostic Group</u>	<u>Number</u>	<u>Percent</u>
Congenital <sup>1</sup>	114	16.9
Lens and cataract	106	15.7
Diabetic retinopathy	52	7.7
Optic atrophy	61	9.0
Degenerative myopia	65	9.6
Glaucoma	57	8.4
Corneal scars and dystrophies	49	7.3
Retinitis pigmentosa	49	7.3
Chorioretinitis, Uveitis,	41	6.1
Others <sup>2</sup>	82	12.0
Total	676	100.0

<sup>1</sup>Include congenital cataracts

<sup>2</sup>Others include macular degeneration (3.8%), Injury (0.7%) Retinopathies (2.5%), Retinal detachment (1.8%), Retrolental fibroplasia (1.3%), and miscellaneous others (1.9%).

Under the treatment plan for the restoration of vision for recipients of blindness allowance, the cost of treatment is shared by the federal and provincial governments on a 75% - 25% basis. Agreements are in effect with nine provincial governments. Treatment of 88 cases was completed during the year. In 73 cases, vision was restored to the extent that the person was no longer blind and, in some of the remaining cases, a significant restoration of guiding vision was obtained.

Since the plan began (in 1948) 1,188 recipients of blindness allowance have received treatment which was successful in 935 cases.

#### Prosthetic Services

The transfer of the Prosthetic Services from the Department of Veterans Affairs to the Department of National Health and Welfare was



authorized effective April 1st, 1965. This date was the starting point from which successive steps were taken towards completion of the transfer process on January 1st, 1966. It was necessary to work out, at considerable length, the administrative details connected with this transfer.

The services transferred were those relating to artificial limbs, braces and orthopedic boots, but excluding hearing aids and eye glasses. The facilities involved in the transfer were the central prosthetic shop at Sunnybrook Hospital in Toronto and twelve district prosthetic shops at Halifax, Saint John, Montreal, Ottawa, Toronto, London, Winnipeg, Calgary, Regina, Edmonton, Vancouver and Victoria.

The centre at Sunnybrook Hospital, Toronto, serves the largest D. V. A. district; in addition, it is a procurement centre for basic raw materials for distribution to other centres. This centre also operates a research section to develop and test new prosthetic and orthopedic appliances, investigate new materials and evaluate outside developments. It also serves as a training centre for staff from other centres and accepts trainees from other organizations.

The two main components of the prosthetic service are those of manufacture and fitting services to patients. With respect to the manufacturing aspect, plans are directed towards the centralized manufacture at Sunnybrook Hospital of limb components and prosthetic devices, at present largely imported. These would be available for purchase by all responsible agencies whether government, local or commercial.

With respect to services, the needs of veterans are of paramount consideration and the Department has acknowledged these needs as a first charge on the service. Besides the services provided by the central prosthetic establishment in Toronto, and the eleven prosthetic shops, visiting fitting services were provided at Charlottetown, Kingston, Hamilton, Windsor and Saskatoon.

Since the provision of prosthetic services to non-veterans is a matter for consideration within provincial health programs, consultations with provincial authorities were initiated in order to determine how the provinces might wish to make use of the prosthetic facilities which have been transferred.

#### Disability Evaluation

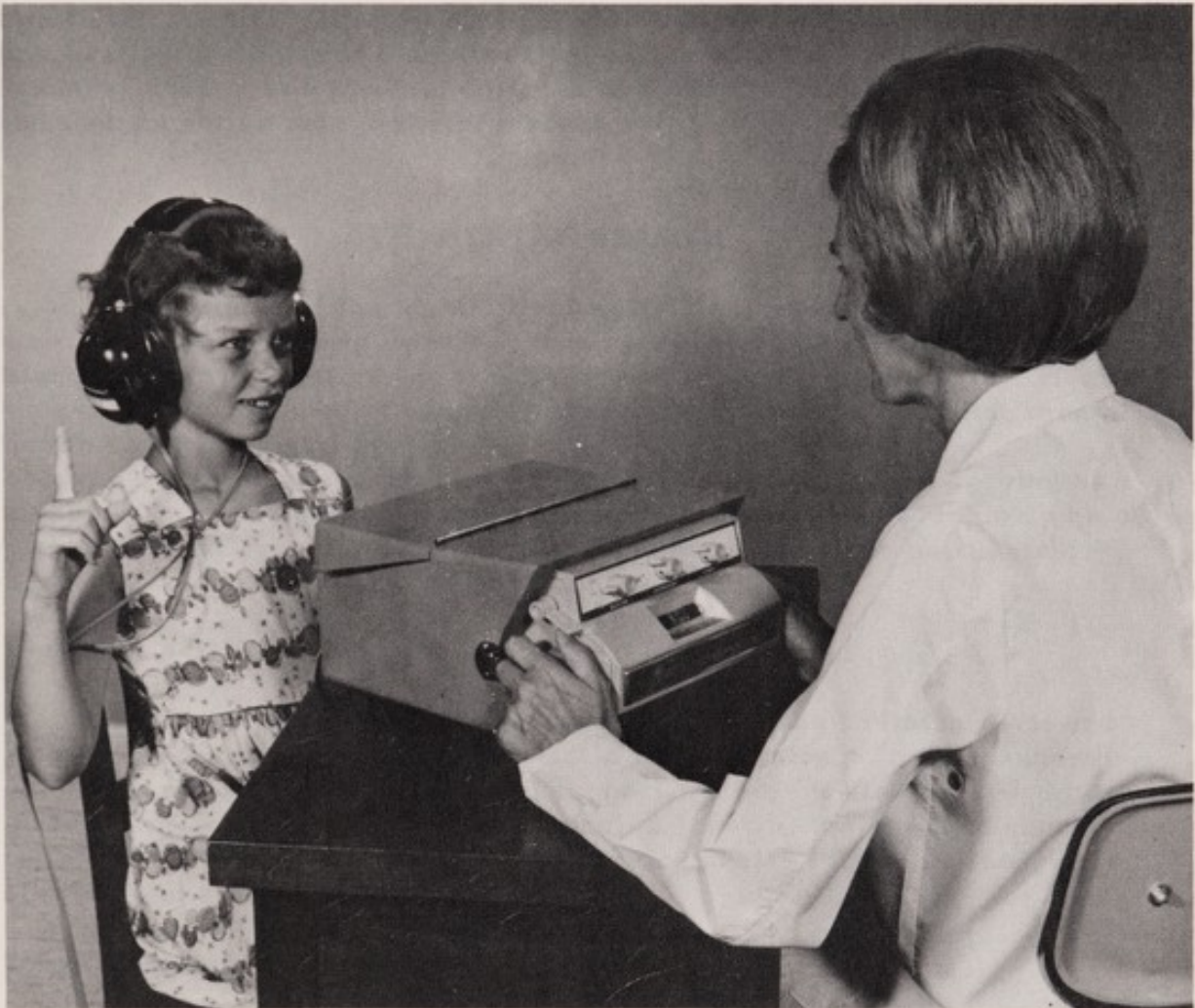
The staff continued to advise on medical aspects of the Disabled Persons Allowances Program. Their efforts have been directed mainly to the development of uniform interpretation of the medical standards employed in the evaluation of disability. It is pointed out that medical decisions in this program are made by joint federal-provincial medical review boards, the manner in which these boards are convened varying from one province to another.

During the year, disability allowances were granted to persons. On March 31, 1966, there were 54,191 recipients.

The Division has completed an initial project to provide information to the disability pensioners of the Canada Pension Plan. Although a number of disabled pensioners will not be available before May, 1970, provision for disability pensioners and widows pensioners, for which disability may be a factor, will be an important factor, will become available in February, 1971. Preparatory work in this field has been underway, and this is expected to increase in the next few months.

#### Long-term Illnesses and Aging

Following a growing concern with problems in the field of aging and

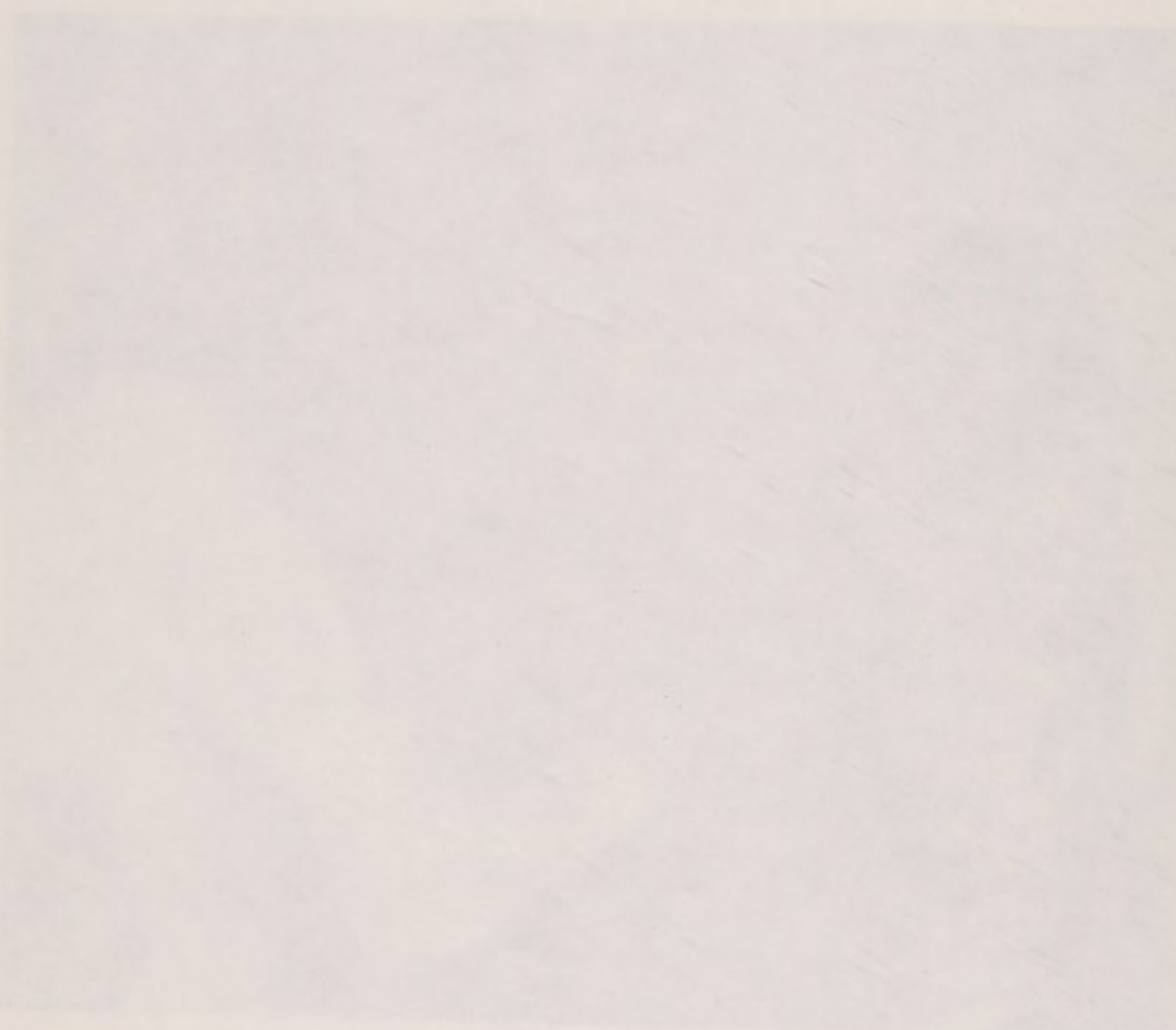


A child undergoes an audiometer test to reveal any deafness. Consultation on such programs as deafness testing is provided by the Medical Rehabilitation Division.



...the ... of the ...  
...the ... of the ...  
...the ... of the ...

...the ... of the ...  
...the ... of the ...  
...the ... of the ...



...the ... of the ...  
...the ... of the ...  
...the ... of the ...

...the ... of the ...  
...the ... of the ...  
...the ... of the ...

The Division has also been consulted on medical questions related to the disability pensions of the Canada Pension Plan. Although pensions to disabled contributors will not be available before May, 1970, pensions for disabled widowers and widows pensions, for which disability may in some cases be an entitlement factor, will become available in February, 1968. Preparatory work in this field has been undertaken, and this is expected to increase in the next fiscal year.

#### Long-term Illnesses and Aging

Reflecting a growing concern with problems in the field of Aging and Chronic Disease, the Division has been consulted on problems related to this field. Medical Officers of the Division participated in the planning and preparation of the First Canadian Conference on Aging held in Toronto in January, 1966. Two Medical Officers of the Division attended the Conference and took an active part in the proceedings.

### MENTAL HEALTH

The purpose of the Mental Health Division is to give leadership in the field of mental health in Canada. It is concerned with the development of standards for preventive and treatment services, the planning in consultation with the provinces of adequate preventive measures including mental health clinics, mental hygiene services to schools, courts, etc., the encouragement of research in the field of mental health, and serving as a clearing house for technical and professional information which may be of use to medical schools, provincial governments and other psychiatric services.

#### Research Activities and Special Studies

Under the National Health Grants Program, the Division reviewed some 65 research grant applications, in collaboration with independent scientific referees, recommending support for 60. It also reviewed numerous applications for training bursaries, special training and short courses, as well as several hundred service grants for mental hospitals, clinics, and similar units.

#### "Mental Retardation in Canada"

The report of the 1964 Federal-Provincial Conference on Mental Retardation was prepared for publication by the Queen's Printer and received wide national and international distribution ("Mental Retardation in Canada", Queen's Printer, 1965. 307 pp., English and French, \$3.00).

#### Liaison and Consultation

Throughout the year Divisional Consultants (one each in psychiatry, psychology, social work, nursing, and mental health education) visited provincial health authorities, professional associations, university departments and voluntary health agencies. Discussions were held on the aggressive homicidal patient; emergency psychiatric services; partial hospitaliza-



tion and community mental health services; support patterns for the training of research personnel.

Members of the Division participated in a special conference on the training of psychologists, the Canadian Conference on Children, the Third Canadian Institute on Mental Health Services, the first Canadian Conference on Alcoholism, as well as appropriate national and international meetings of the mental health professions.

Plans were completed for a special national meeting of selected psychiatric nursing specialists; lectures were given by the consultants to universities, educational seminars and institutes.

#### Education and Information

The Division's 60-page bi-monthly journal "CANADA'S MENTAL HEALTH", directed primarily to professionals in the field and published in both English and French editions, reached a circulation of 22,000 - an increase of 5,000 over the previous year.

Featuring articles, reports, book reviews and a wide variety of national and international news, CMH also published a number of monographs as supplements to particular issues of the journal, including: "Rehabilitating Long-Stay Mental Hospital Patients", "Significant Aspects of a Helping Relationship", "School Achievement and Learning Difficulties", "Mental Health Pocket-books and Paperbacks" (Revision), "Community Care of the Mentally Ill", CMH annual "Subject and Author Index". "Mental Health Pocketbooks and Paperbacks" was also published in the 1965 McGraw-Hill book "International Trends in Mental Health"; two other monographs were reprinted by the American Psychiatric Association for distribution to its members. From its supply of over 50 Supplement titles, the Division responded to requests for over 75,000 during the year - over and above those regularly distributed with the journal. The November, 1965, Special Issue dealt with "Community Mental Health"

The Division prepares numerous posters, pamphlets and booklets which are distributed through provincial Health Departments to assist in preventive work. These include a wide variety of topics, the titles of which may be obtained from any provincial Health Department. Annual distribution of these materials totals over one million pieces.

A filmstrip "Clear Gain - Vocational Preparation of the Mentally Retarded" was completed this year.

Researching for a new film to deal with rehabilitation and public attitudes toward the mentally ill was initiated.

#### Advisory Committee on Mental Health

The Division, in the conduct of its program, received the assistance of provincial mental health directors, senior scientists, doctors and representatives of the mental health professions, all of whom serve on the Advisory Committee on Mental Health and its Subcommittees concerned with research, personnel, addictions, development of services, rehabilitation, statistics, mental retardation, and public education.

## NURSING ADVISORY SERVICE

During the past year the title of the Chief Nursing Consultant's Unit has been changed to "Nursing Advisory Service". This reflects a shift in emphasis to include a broadening of consultation services available not only to the Department and to the provinces.



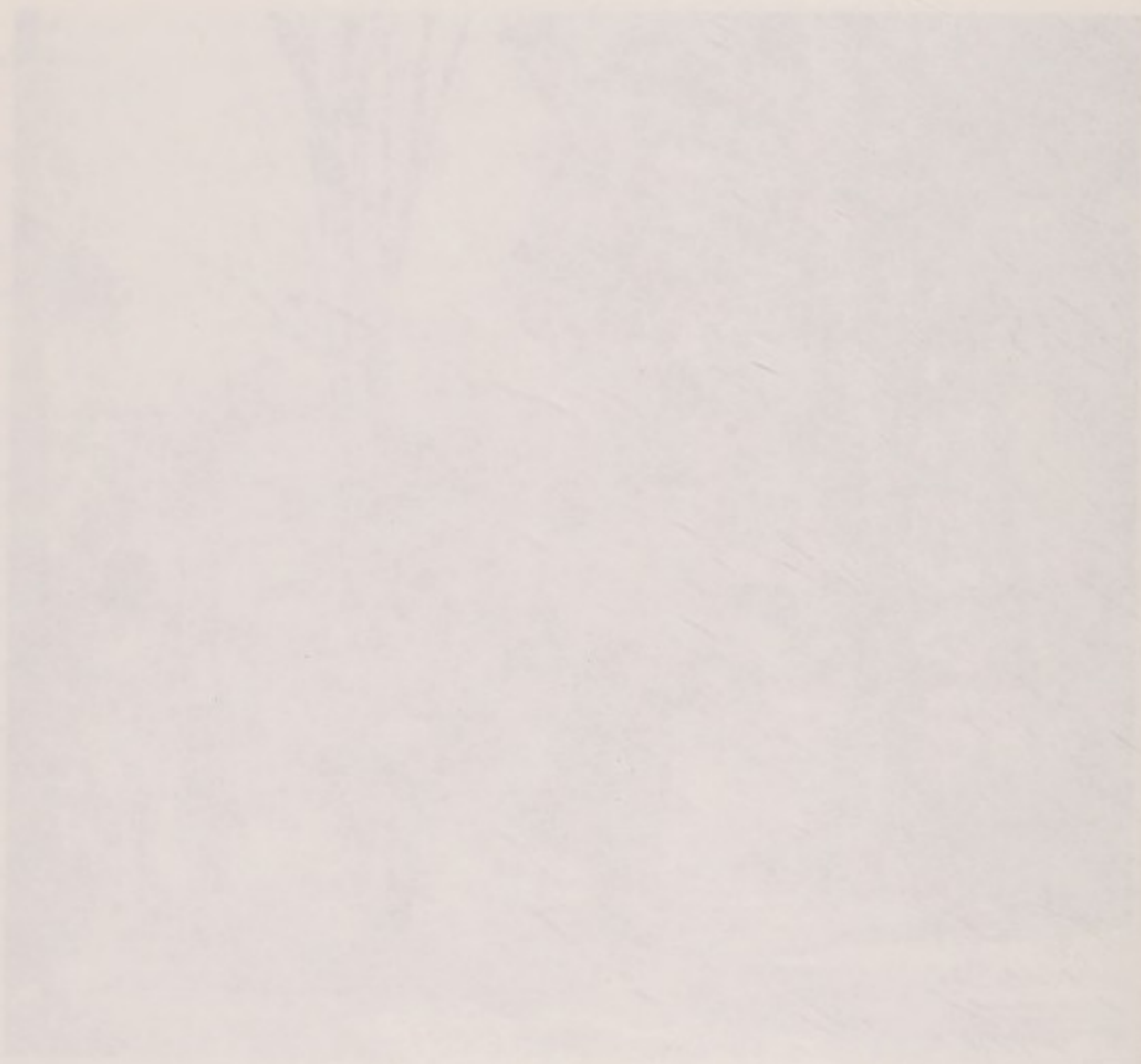
This pleasant park scene reflects the positive thinking of the Department's Mental Health Division on mental health. Staff of the division works closely with provincial health services across Canada.

The present stage of reorganization in the Department makes projection of future activities of the Nursing Advisory Service Unit uncertain. With the change in title, however, and with the addition to staff of several well-qualified nursing consultants whose background is public health nursing and related fields will enable them to function effectively in the Department and, at request, in the provinces, a useful and significant role for Nursing Advisory Service seems assured.



Figure 1. A schematic diagram of the experimental setup. The subject is seated in a chair, viewing a screen through a mirror. The screen displays a target (a small circle) and a starting point (a larger circle). The subject's hand is positioned at the starting point. The distance between the starting point and the target is 10 cm. The subject is instructed to move their hand from the starting point to the target as quickly and accurately as possible.

The subject is seated in a chair, viewing a screen through a mirror. The screen displays a target (a small circle) and a starting point (a larger circle). The subject's hand is positioned at the starting point. The distance between the starting point and the target is 10 cm. The subject is instructed to move their hand from the starting point to the target as quickly and accurately as possible.



This diagram illustrates the experimental setup. The subject is seated at a table, viewing a screen through a mirror. The screen displays a target (a small circle) and a starting point (a larger circle). The subject's hand is positioned at the starting point. The distance between the starting point and the target is 10 cm. The subject is instructed to move their hand from the starting point to the target as quickly and accurately as possible.

The subject is seated in a chair, viewing a screen through a mirror. The screen displays a target (a small circle) and a starting point (a larger circle). The subject's hand is positioned at the starting point. The distance between the starting point and the target is 10 cm. The subject is instructed to move their hand from the starting point to the target as quickly and accurately as possible.

## NURSING ADVISORY SERVICE

During the past year the title of the Chief Nursing Consultant's Unit has been changed to: "Nursing Advisory Service". This reflects a shift in emphasis to include a broadening of consultant services available on request to the Department and to the provinces.

The professional staff of Nursing Advisory Service presently comprises the Chief Nursing Consultant and the Public Health Nursing Consultant. Although authority was granted in 1964-65 for an additional nursing consultant position no one qualified in the subsequent competition. It is anticipated the position will be readvertised in 1966-67.

The Public Health Nursing Consultant returned to the Unit in July following completion of work for a Master's degree in Public Health (M.P.H.) at Ann Arbor, Michigan.

During the balance of the year the Public Health Nursing Consultant was occupied with firstly, field trips to two provinces to carry out, at their request, an evaluation of their public health nursing programs and secondly, with the completion of her report of a study sponsored by the Research Committee of the Canadian Public Health Association. ("A Study of the Activities of Nursing Personnel in Six Health Units and Municipal Health Departments in One Province of Canada".)

In February 1966 the Public Health Nursing Consultant was loaned to World Health Organization to carry out a short-term assignment as a member of a team charged with the organization of a national health service in Libya, North Africa.

General activities in the Unit have followed a pattern similar to that of other years viz: assessment of certain projects submitted by the provinces under National Health Grants; liaison with the Canadian Nurses' Association and its constituent bodies, the provincial nursing associations; liaison with External Aid Office, the International Health Branch of this Department, and with university schools of nursing receiving Colombo Plan students; arrangement for visits to the Department by nursing students from university and hospital schools of nursing; co-operation with the Canadian Nurses' Association in arrangement of programs for international nursing visitors; membership on various committees within and without the Department; preparation of speeches, papers, etc.

The present stage of reorganization in the Department makes projection of future activities of the Nursing Advisory Service Unit imprecise. With the change in title, however, and with the addition to staff of several well-qualified nursing consultants whose background in public health nursing and related fields will enable them to function effectively in the Department and, on request, in the provinces, a useful and significant role for Nursing Advisory Service seems assured.



## NUTRITION

The program of the Nutrition Division aims at improvement of health and fitness of Canadians to the extent that this can be achieved by better nutrition. With a relative abundance of food supplies nationally, nutritional inadequacies nevertheless continue to be reported, including all age groups and from both the lower and higher levels of income. Moreover, problems attendant with overnutrition are increasingly recognized as being of major public health concern.

Operating primarily on a consultant basis - advisory to other units within the Department of National Health and Welfare, to other federal departments and agencies, to provincial governments and to national professional and commercial organizations - the program of the division includes the areas of research, of education and of practical application of knowledge in the science of nutrition. These functions are carried out by a professional staff consisting of a Chief of Division, with medical specialization in nutrition, and Consultants in Dietetics, in Applied Nutrition, in Nutrition Education and in General Nutrition.

### Research

Assistance was provided in the planning and conduct of a field study in the Arctic of the nutritional status of the Eskimos, including assessment of dietary intake, clinical examination and biochemical investigations. Advice and assistance was further provided on methods for obtaining more detailed information on the dietary intake of Eskimo children in schools.

Studies were carried out in co-operation with provincial departments of health to assess the educational effectiveness of two new informational publications.

Study was initiated into research techniques for evaluation of the effectiveness of various means of public communication in promoting dietary improvement.

Food consumption data for Canada for the year were calculated in terms of the average nutrients available per person. Preliminary work was undertaken on means of obtaining more detailed knowledge about national food consumption patterns and the nutritional status of Canadians.

An initial study was conducted of comparative costs in hospital operation in the use of pre-packaged infant formulae versus conventional formula-room preparation. This study is to be extended to provide nationally applicable data.

Preliminary studies were undertaken of a methodology to be used in assessing staffing needs for hospital dietary departments.

Nutrition scientists throughout the country continued to display interest and support for the national repository of nutrition research, a central reference service maintained of nutritional investigations reported or in progress.



Assistance was provided on planning and design of research projects under National Health Grants, for investigation of nutrient values of Canadian foods; of methodology for assessment of nutritional status; of nutritional requirements of the elderly; and of future projections of conditions of employment and the corresponding training requirements for professional dietitians.

## Education

Consultant service was provided to provincial departments of health, to other federal agencies and to national commercial organizations with regard to methods of presentation of nutrition information.

Nutrition education materials are planned in co-operation with provincial departments of health to supply those materials which are most needed in support of their programs. The publication program this year included: a new poster, Figure Right With Canada's Food Guide, for teenagers; revisions of the booklets Healthful Eating (French) and the Noon Meal (English and French) and reprintings of the folders Good Red Blood (English), Good Eating With Canada's Food Guide (English and French), Nutrient Values of Some Common Foods (English and French) and of the poster Time For A Good Noon Meal (French); French translation of the Dietary Standard for Canada and of Meals for Serving Twenty (an institutional feeding manual) was completed with production scheduled for the coming year.

The twelve page periodical "Canadian Nutrition Notes" was published in eight issues as a medium for providing information to professional groups. Circulation was approximately 5,900 English and 2,200 French.

A comprehensive cataloguing of reports listed in the national repository for Canadian research was published as an issue of Reference Reading List, the quarterly mimeographed publication for professional use as a reference to literature and reports.

In co-operation with Information Services, four radio scripts were planned and a script was planned for production of a film dealing with family nutrition. Advice was provided on radio spot announcements and press fillers.

A three-day national conference was held dealing with the nature and extent of training in nutrition to be included in university courses preparatory for medical, paramedical and social sciences professions.

Assistance was provided to provincial departments in planning the nature of training, and in conduct of training courses, for non-professional staff in food services.

Advice and assistance was given to universities and to professional bodies on the nutrition component in professional training, in undergraduate, postgraduate and refresher courses, and lectures on nutrition and public health were given to university students and at meetings of professional associations.



Consultation was provided to authors and publishers on technical accuracy and method of presentation in textbooks and publications for public information.

### Food Service in Hospitals

Advice and assistance and direct consultation was provided to provincial governments, individual hospitals and to the Health Insurance and Resources Branch on various aspects of the dietary service including layout and design, equipping, staffing, organization and general operational problems.

Assistance was provided, in co-operation with the Hospital Studies Unit on preparation of a manual to be used as a guide in the operation of dietary departments.

Studies were commenced in co-operation with the Health Facilities Design Division attempting to relate building construction cost of the hospital dietary department to operational costs.

### Other Consultation Services

Advice was provided to various government agencies, on the needs and possible organizational approaches for special nutrition services such as those directed to local public health needs, welfare services and welfare rations for food support programs, special rations for unusual situations, and community services for the aged or handicapped.

Technical advice and assistance was provided on international projects of F. A. O. , W. H. O. , U. N. I. C. E. F. , and Freedom From Hunger. Representation was provided for the F. A. O. biennial Conference in Rome and active liaison was maintained with the Food and Nutrition Board (N. R. C. / N. A. S. ), in Washington, D. C. , U. S. A.

Arrangements were made, in co-operation with International Health and External Aid, for special training in food service management for personnel from foreign countries.

### Advisory Committees

The Canadian Council on Nutrition met on June 7 - 10, 1965. Topics discussed included: The need for studies in assessment of nutritional status of Canadians, both for the Indians and Eskimos and within the general population, and the potential methods for such studies; the shortage of public health nutrition personnel throughout Canada and related staffing problems; revision of the Table of Food Values Recommended for use in Canada; the nutrition component in the War on Poverty and projects of the Company of Young Canadians; the addition of Vitamin D to milk supplies; and the education in nutrition provided in the training of the various professions who might work together in the community to strengthen local nutrition programs.

The Dominion Provincial Nutrition Committee, a committee of the Canadian Council on Nutrition consisting of a nutritionist from each province

regarded with the professional staff of the Nutrition Division. This staff is composed of dietitians, nutritionists, and nurses. The division is responsible for the development of a continuing educational program for the staff of the division by which the Nutrition Division may meet current nutritional requirements.

### OCCUPATIONAL HEALTH

The Division maintains laboratories, clinical facilities, research, and training programs in occupational health and air pollution for the purpose of protecting the health of Canada's workers and the general public.



The Nutrition Division has a continuing educational program aimed at such professionals as dietitians, nutritionists and nurses. Here a male nurse feeds a patient unable to eat by himself.





together with the professional staff of the Nutrition Division also met on June 7 - 10, 1965. The annual meeting of this committee provides an opportunity to review and co-ordinate provincial programs and enables discussion of the means by which the federal program may best assist provincial programs.

## OCCUPATIONAL HEALTH

The Division furnishes laboratory, clinical, technical, consultant, and training services in occupational health and air pollution for the purpose of protecting the health of Canada's workers and the general public.

Special projects concerned with air pollution, industrial hygiene in shops and offices, dust control in mines, and laboratory analytical methods have been undertaken for such international organizations as the World Health Organization, the International Labour Organization, and the International Union of Pure and Applied Chemistry.

Problems in occupational health and air pollution vary, depending upon the dynamic nature of Canadian industrial development. To cope with such changes, the program must be kept flexible.

The Division has continued to aid provincial and municipal governments, universities, and industry through a limited program of teaching and in-service training for industrial hygiene and air pollution surveys.

Members of the Division, the Ontario Air Pollution Control Division, and the Meteorological Branch, Department of Transport, are co-operating in a study to determine the concentration of particulate pollution affecting the Windsor, Ontario, metropolitan area. Sources of pollution are the iron and steel manufacturing industries and other industries located on the Michigan side of the Detroit River. A report on the findings has now been sent to External Affairs and the Ontario Government.

The Research Institute of Industrial Hygiene and Air Pollution, University of Montreal, was assisted in planning and organizing a study to determine the effect of industrial emissions and other sources of air contamination on respiratory diseases and lung cancer in Montreal. This study was initiated under a federal grant. To avoid undue delay in commencing air sampling work, the Division lent the Institute air sampling equipment. Specialized laboratory assistance was given in the analysis of samples of polycyclic hydrocarbons and other carcinogenic substances.

### Steering Committee for the National Study of the Biological Effects of Asbestos

Asbestos dust has been suspected and reported in the literature for many years as contributing to the increased incidence of malignant tumours of the lung. Of particular importance as a general public health or environmental health matter has been the report in the literature of cases of cancer of the lung involving the pleura (mesothelioma) in patients in whom an occupational exposure to asbestos dust could not be elicited. Canadian



asbestos (chrysotile) differs, however, in some important respects from a type of asbestos produced elsewhere, exposure to which has been shown to be associated with neoplasia.

In view of the increasing importance of this problem, the Occupational Health Division, on behalf of the Department, has initiated a Steering Committee for the National Study of the Biological Effects of Asbestos. The purpose of the Steering Committee is to bring about periodic exchange of information on studies of the health effects of asbestos; to assure that there is integration and co-operation between interested workers; to stimulate interest and review resources available for studies in Canada directed at investigating the nature and extent of possible hazards due to exposure to the Canadian fibre.

In January, 1966, the Occupational Health Division and the Public Health Engineering Division moved into a new Environmental Health Centre at Tunney's Pasture. The new facilities will permit a much more satisfactory development of laboratory and technical services in air pollution in Occupational Health and will also permit the two Divisions concerned with environmental air and water pollution problems to work closely together in matters of health.

#### Environmental Assessment Unit

##### Air Pollution Field Studies

Air pollution activities have included assistance in the development and operation of community air pollution surveys, a national air monitoring program, atmospheric diffusion studies and laboratory development of field instrumentation.

The national air monitoring program is being established in co-operation with the Meteorological Branch, Department of Transport, and various provincial and municipal organizations. A liaison meteorologist was assigned to the Occupational Health Division on a full time basis in the summer of 1965 to assist in the co-ordination and publication of data. Observations of particulate and gaseous air contaminants are coded on punched cards along with relevant weather data and the information is being processed by a computer at the Meteorological Branch in the Department of Transport at Toronto.

Atmospheric diffusion studies at nuclear power sites have been carried out in co-operation with the Department of Transport and other government agencies. In these studies, atmospheric tracers have been used to evaluate the possible health hazard in the community surrounding nuclear power stations and also to evaluate stack designs for these plants.

Assistance has been given with community air pollution studies in New Brunswick, Nova Scotia, and British Columbia.

A program of surveillance of smoke pollution from vessels plying the Detroit River has been continued for the International Joint Commission. A



new air pollution reference in the Detroit-Windsor and Sarnia-Port Huron areas is under active consideration, and this reference will involve the study of air pollution from all sources in this area.

The Unit has been concerned with consultant activities in air pollution control in such problems as the safety of the Heavy Water Plant at Glace Bay, Nova Scotia.

#### Industrial Hygiene Field Studies

Industrial hygiene field studies have included dust and radiation studies in mines, the investigation of noise at airports, health hazards in postal terminals, exposure to mercury and other air contaminants in agricultural laboratories and toxic gas exposures in underground facilities of the Department of National Defence.

Engineering consultant services have been rendered to federal and provincial governments, industries, labour unions, and universities on a wide variety of industrial hygiene and industrial ventilation problems.

#### Laboratory Services and Research

In addition to supporting air pollution and industrial hygiene field studies, the physical and chemical analytical sections have been active in the development of improved techniques in the evaluation of hazards.

Analytical studies have included carbon monoxide, hydrocarbons, mercaptans, polycyclics, arsenic, air contaminants in divers' air, and metals.

Physical analysis projects have included studies of improved techniques of X-ray spectroscopy and X-ray diffraction and separation of micron-sized particles.

#### Biomedical Unit

This Unit is concerned with the study of the biomedical effects of a wide and rapidly increasing range of adverse physical and toxic environmental factors. It co-operates with the Environmental Assessment Unit in identifying and controlling environmental hazards to health. The program of the Biomedical Unit encompasses clinical, bio-statistical, physiological, pathological, and toxicological studies. These studies include the clinical and pathological manifestations of exposure to adverse factors, the mode of action of the various chemicals, and the development and application of improved methods for diagnosis and medical control. Consultative services to federal and provincial government departments and other agencies are part of the program.

#### Medical and Nursing Consultant Services

##### Clinical Consultants:

The clinical consultants took part in all environmental assessment surveys, providing medical interpretation of environmental factors on the



health of exposed individuals. Problems dealt with during the year included the biomedical effects of physical factors such as noise, ultraviolet radiation, etc., the clinical aspects of a wide range of toxic chemical substances and legislation pertaining to occupational diseases. A review of problems associated with shift work was completed.

A major component of the clinical program was the further development of an investigation of the health effects of occupational exposure to agricultural chemicals (notably phosphamidon) used during aerial spraying operations of large areas of forest land in New Brunswick. A beginning was made with the planning of clinical surveys in two mining communities in Newfoundland and the Northwest Territories, respectively.

The consultants participated in activities of various committees including Canadian Standards Association, National Research Council's National Committee on Forest Spraying, Interdepartmental Committee on Pesticides, Defence Research Board's Committee on Pesticides, Steering Committee for the National Study of the Biological Effects of Asbestos. They also took part in the teaching program of public health nurses at Ottawa University.

#### Nursing Consultant:

Emphasis continued to be placed on closer liaison between organized community health and occupational health services, as well as qualified adult counselling with stress on teaching the principles of health, together with the value of their application, to employed members of families.

As part of a program for advancing the teaching of occupational health, a series of lectures was delivered to public health nurses attending the University of Ottawa, with other university training schools being visited by the consultant.

A high degree of co-operation was maintained between the consultant, the staff of the national Victorian Order of Nurses, and the regional supervisors in efforts to extend further the kind and quality of services that the V.O.N. can furnish in meeting the growing demands of industry for part-time nurses.

Health services for hospital and civic employees, as well as university students and staff, are still expanding. The consultant was active in promoting the development of such services by providing assistance on many occasions.

#### Biostatistics Program

Greater emphasis was placed on epidemiological studies and the accumulation of data relevant to occupational health. Investigations were continued on the occurrence of lung cancer among fluorspar miners of Newfoundland and on estimating the health status of those in a variety of occupational groups, with particular emphasis being placed on health effects of shift work. Planning of comprehensive health surveys of several communities was begun. These surveys will include multiphasic clinical examinations of employees and others in the communities who are exposed to environmental hazards and morbidity and mortality studies.



## Environmental Toxicology Program

A rise over the past few years in the manufacture and everyday use of many kinds of toxic chemical substances has led to an increasingly greater exposure of the working population and general public to such agents.

Considerable progress was made in assessing the biological effects, the mode of action, and biotransformation of toxic chemicals which comprise health hazards to specific occupational groups. Such chemicals include widely used solvents and carcinogenic substances frequently encountered in industry.

Studies were continued on the successful development of improved laboratory instruments and methods necessary for evaluating the toxicity and safety of a variety of chemicals, including carcinogenic materials. From these enquiries, compounds have been suggested as effective replacements for certain toxic materials widely used in industry.

## Enzyme Chemistry Program

Valid knowledge on the biological effects and mode of action of pesticide chemicals is required if these agents are to be used safely. Enzyme systems were used to study the effects of variables, both singly and by their interactions, influencing the toxicity of such chemicals. Advances were made in methods developed specifically for estimating: human cholinesterase in whole blood and in field specimens, erythrocyte acetyl cholinesterase, as well as A-esterase in rat serum. The use of such methods was highly valuable in surveys designed to detect any possible injurious effects of insecticides on humans.

## Pathology Program

In addition to experimental investigations on toxic substances, it is believed that studies on the pathology of specimens obtained from individuals exposed to industrial and other hazards would be valuable in providing information for control purposes. On this basis, a program of pathology was begun with the initial objectives of defining early tissue changes attributable to radiation and other noxious agents. Experimental pathology studies are continuing and pathology services have been made available to other sections of the Unit.

## Publications and Technical Information Service

The Division publishes the "Occupational Health Review", a quarterly journal dealing with technical and professional subject matter, and the "Occupational Health Bulletin", a monthly publication receiving wide distribution and dealing with occupational health subject matter of interest to lay and professional groups.

Scientific publications of staff members of the Division deal with a wide range of laboratory and occupational health subjects. A list of titles of these publications is available upon request.



Industrialized countries...  
...the world of today...  
...the world of tomorrow...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

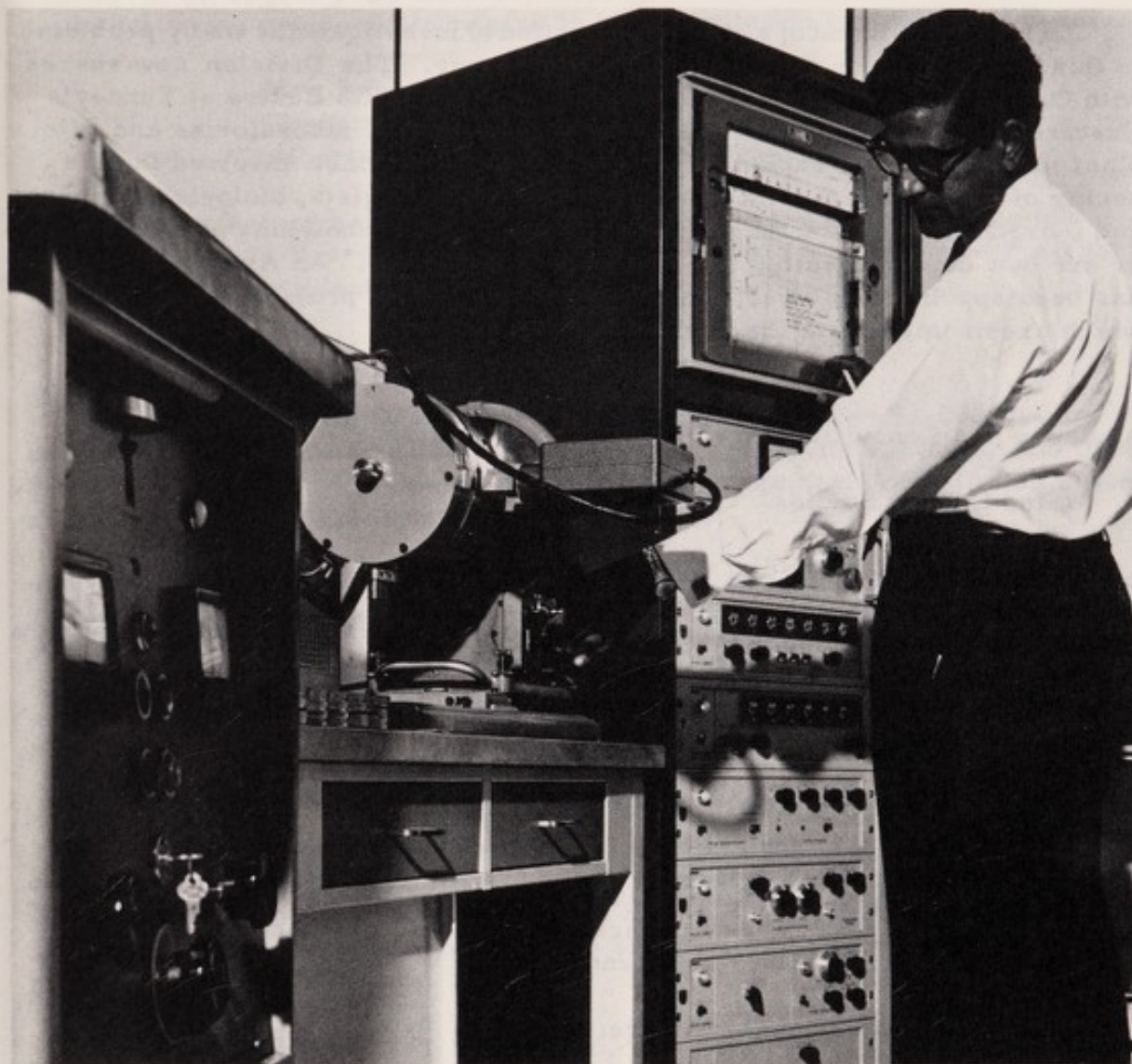
...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...

...the world of the future...  
...the world of the future...  
...the world of the future...



An x-ray spectrograph is taken for analysis of toxic substances, such as lead or selenium, in connection with air pollution and environmental health studies. These studies are a major area of interest of the Occupational Health Division.



## PUBLIC HEALTH ENGINEERING

During the past fiscal year, the activities of the Division continued to reflect the change in program emphasis to consulting and advisory services associated primarily with the health aspects of water pollution. Regulatory and advisory responsibilities related to water supply continued to form an essential portion of the Division's total program.

The development of a research section to investigate the many problems in this area of water pollution is well underway. The Division now shares with Occupational Health the new Environmental Health Centre at Tunney's Pasture, which provides all the services in terms of laboratories and pilot plant to insure a full capability for the basic disciplines involved in this sector of the environmental health field. Bacteriologists, biologists, organic and inorganic chemists, engineers and supporting technicians are available or are now being recruited to effectuate the program. An Associate Chief has been appointed to direct and co-ordinate research projects in this field which are of interest to the Division.

### Advisory and Consulting Services - Water Pollution

#### 1. Water Quality Studies

##### a) International Joint Commission References

The Division provides members for a Board of Technical Advisers to the Commission which is formed for each reference. It also supplies engineering and analytical teams to participate in the field work associated with such studies.

Surveys which have been completed but are subject to continued surveillance are:

St. Croix River Reference  
Great Lakes Connecting Channels Reference  
Rainy River Reference.

New studies now underway are:

Red River Reference  
Great Lakes Reference.

The latter involves Lake Erie, Lake Ontario and the International Section of the St. Lawrence River. A monitoring survey was carried out during 1965 in the St. Lawrence River section using divisional staff and laboratory facilities in Ottawa.

A considerable amount of planning and organizational work was required by staff members to fashion programs for the coming fiscal year and provide the Commission, through the various Boards of Technical Advisers, with the comprehensive reports associated with these various investigations of



boundary waters. The major effort was directed to the Great Lakes Reference which is the largest study of those noted, and involves the co-operation of the Department of Mines and Technical Surveys, the Ontario Water Resources Commission and United States federal and state agencies.

b) Inter-Provincial and Provincial Studies

On request, the advisory services of the Division were extended to the following provinces in regard to water pollution in provincial waters:

New Brunswick - Presquile River  
Quebec - Pacpebiac Harbour  
Alberta - St. Mary and Belly Rivers

A satisfactory agreement was arranged with the British Columbia Pollution Control Board regarding sewage disposal from Vancouver Airport, Cariboo Indian Residential School and Radium Hot Springs.

c) Atlantic Development Board

The Atlantic Development Board has been given \$2,000,000 to assist Maritime industries to install pollution abatement systems, and these funds will be made available to each industry on the basis of pollution abated as determined by the Board.

This Division is responsible for conducting the field surveys required to evaluate industrial wastes discharged to fresh waters in the Atlantic Provinces, and five such surveys were carried out this year. Major industries involved are pulp and paper, potato starch, frozen food and poultry processing.

d) Shellfish Program

Surveillance investigations of shellfish growing areas are carried out as part of the shellfish control program under the Mutual Shellfish Certification Agreement with the United States. Eleven engineering studies and seven manuscript reports based on bacteriological studies made were completed during the year.

e) Expo '67

The Division is providing the technical teams required to conduct pollution studies of the waters, adjacent to the Expo islands, which are to be used for recreational purposes and harbourage. Consultative services were also provided in regard to the plans and specifications for the Habitant '67 project and the Canadian Pavilion at the World's Fair.

2. Assessment and Evaluation of Pollution Control Systems Associated with Federal Activities

Examination of waste treatment and control systems operated by or for various federal departments and agencies are made on a request basis.



Major evaluation studies in this work area are undertaken at times to assess all aspects of design, operation and control, and the effect of waste effluents on receiving streams.

Plans for new treatment systems or modifications of existing plants are also reviewed, and complete appraisals of the projects are provided for the agencies concerned.

A few examples of particular interest chosen from the more than forty-five studies conducted during the year under this program are noted as follows:

a) In co-operation with the Department of Northern Affairs and National Resources, technical designs of waste treatment facilities for National Parks in New Brunswick, Nova Scotia and Newfoundland were provided.

b) In co-operation with the Department of Citizenship and Immigration, sewage lagoons were designed for the Sun Child, Hochise and Hobbema Indian Schools in Alberta, and the Cariboo Indian Residential School in Cranbrook, British Columbia.

c) Evaluation studies of sewage treatment systems serving R.C.A.F. Stations at Lac St-Denis, Quebec and Moosonee, Ontario were conducted for the Department of National Defence.

### 3. Boards and Committees

Personnel from the Division participate as members on several boards and committees that are associated with water pollution, and which permit the interchange of information for the benefit of all agencies concerned. Both the consulting and research activities of the Division profit by these associations.

#### a) Advisory Committee on Public Health Engineering

Treasury Board approval for the establishment of this Committee has been granted and arrangements for membership are now being finalized. The primary function of this Committee will be to comment on problems of environmental health referred to it by the Division, to review and promote health standards, and to identify and co-ordinate areas of research in this field.

#### b) National Conference - Pollution and our Environment

The Public Health Engineering Division is represented on the Intergovernmental Advisory Committee established to assist in the planning of the National Pollution Conference. Responsibility has been assumed for coordinating all federal government background papers and for chairing an interdepartmental subcommittee which will deal with preparatory activities for the conference. These include: compilation of the invitation list of delegates; arranging for departmental reviews of background papers; briefing of delegates and discussion leaders; and any other matters relating to the conference exercise.



c) Other examples of divisional representation on similar groups are as follows:

Research Committee on Household Treatment Devices.  
Interdepartmental Shellfish Committee.  
Atlantic Regional Advisory Committee on Industrial Pollution.  
Associate Committee on Water Pollution Research - National  
Research Council.  
Interdepartmental Committee on Resources.

#### 4. Applied Research-Water Pollution

Studies of pollution abatement and control systems were carried out to assess operation, control and design parameters for such systems, and recommend improvements. Special emphasis is placed on sewage lagoons since they can provide a satisfactory and economical solution to many waste disposal problems associated with isolated federal establishments; such as R.C.M.P. Stations, Indian Schools and Hospitals.

The assessment of conventional systems operating in the subarctic environment of Canada's northland constitutes a major part of the applied research program of the Division. Ten studies in this category were undertaken during the year.

#### 5. Public Health Research Grants - Water Pollution

Health grants to universities, foundations and other capable agencies are used to promote research in this field. Nine projects were carried out during the year, including the following:

- a) Field and laboratory study of the deficiency and limitation of anaerobic lagoons in sewage treatment.
- b) A study of the aeration of anaerobic sewage ponds.
- c) Measurements of long-term water pollution trends by biological methods.

A total of \$580,957 was spent under this program which includes the training of personnel in this work and assistance for the field operations required for pollution surveys as well as research.

#### Advisory and Consulting Services - Water Supply

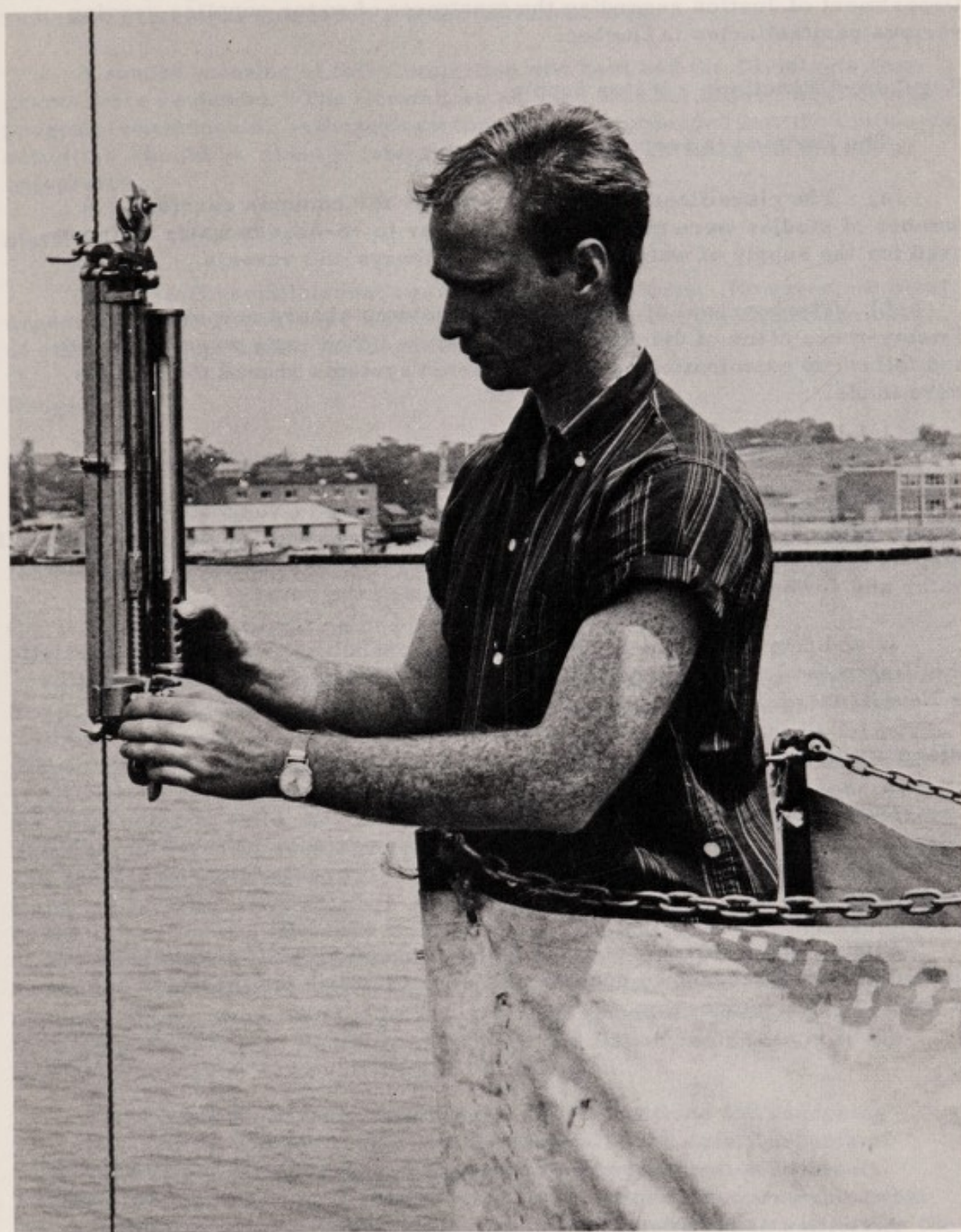
The Division provides consulting advice on all phases of water supply and treatment to various federal departments and agencies on request. This includes applied research in the field to evaluate treatment units.

Over forty studies were conducted in this category, including those outlined as follows:

- a) A study to determine the feasibility of a community water supply and sewage system for the Sioux Village Indian Reserve in Saskatchewan was carried out in cooperation with the Department of Citizenship and Immigration.







A technician prepares a Knudsen bottle to collect water samples. It is part of the equipment used by the Public Health Engineering Division in a water pollution survey of international boundary waters.



b) Technical advice was provided to the Department of Public Works concerning iron removal and the installation of water softening equipment in the Federal Building at Vanderhoof, British Columbia.

c) The consulting services of the Division were extended to the Department of Justice regarding the treatment of water supplies serving various penitentiaries in Quebec.

#### Regulatory Functions - Water Supply

The Division is responsible for:

a) The classification of water sources for common carriers. A number of studies were made during the year to re-assess water sources used for the supply of water to aircraft, railways and vessels.

b) The approval of potable water systems aboard new vessels. Twenty-three plans of drinking water systems for vessels were reviewed and follow-up examinations of the completed systems aboard the vessels were made.

#### Laboratory Services

Permanent laboratories have been established in Vancouver and Ottawa with chemists, bacteriologists and technicians to provide the analytical support required to complement work programs across Canada. Over 700 water and sewage samples were analyzed during the year.

In addition more than 3,100 bio-assays of shellfish extracts for paralytic shellfish poison were carried out as a part of the toxicity control programs in New Brunswick, Nova Scotia, Quebec and British Columbia.

#### Information and Training

During the year some twenty presentations in the form of papers, lectures and T.V. interviews were made by the professional staff to interested organizations. This included four papers presented to professional associations.

Fifteen short training courses were attended by staff members; while one engineer was absent on educational leave to obtain his master's degree in public health engineering.

### RADIATION PROTECTION

Activities of the Division are directed towards protection of health of radiation workers in industrial and medical establishments and programs designed to assess exposure of the general population from all sources of ionizing radiation including fallout from nuclear tests.



## Advisory Committee on Radiation Protection

This Committee is responsible for providing the Division with assistance and advice as additional support for the Department's Radiation Protection program and is responsible for studying and recommending radiation protection standards for use within Canada.

A second meeting of this Committee was held and the Division's programs were reviewed. The Committee advised that the fallout monitoring program was adequate at the present time and recommended that the Division's activities should be closely integrated with research being conducted at universities.

### Staff

Total staff establishment remained at 79 positions. However, to meet urgent needs, four positions were made available from the establishments of other Divisions within the Department.

### Programs

#### (a) Medical and Biological

During the year work was begun on the development of programs related to the behaviour of radioactive isotopes in the human body and on biological methods of determining radiation damage to human tissues.

#### (b) Radioisotope Utilization and Safety

As a principal health and safety adviser to the Atomic Energy Control Board, the Division assesses the potential hazards from all uses of radioisotopes in Canada and recommends precautionary measures to be taken to protect the user and members of the public. During the year the Division scrutinized a total of 1,523 Radioisotope Licence applications and specified the requirements for safe use of the radioactive material involved. Of these licences, 273 were for medical purposes; 653 for research; 317 for industry and 280 for miscellaneous uses. In addition, 783 applications for amendments to existing licences were examined and dealt with. As recommended by the Department's Advisory Committee on Clinical Uses of Radioisotopes, steps were taken to bring medical radium under controls similar to those exercised over other (artificially produced) radioisotopes. Known users of medical radium were advised of the new requirements. In this connection, a safety code entitled "Handling of Radium and Radon Sealed Sources for Medical Purposes" was published and distributed.

Field inspections were carried out at 438 locations for assessing potential hazards and advising users on the health and safety aspects of their work and investigating high exposures or contamination incidents. Twenty persons were found to have received external exposures somewhat in excess of the recommended maximum control limit but in no case was the worker seriously harmed.

The Film Monitoring Service continued to grow and the radiation monitors were used by approximately 18,500 people by the end of 1965. Two



special services were introduced: a neutron monitoring service at the beginning of 1965 and a criticality monitoring service early in 1966.

(c) X-Ray Safety

The Advisory Committee on X-Ray Safety Standards met in March 1966. Two safety codes prepared by the Division were reviewed. These were "Specifications for Medical and Dental X-Ray Applications" and "Installation and Procedures for X-Rays for Medical and Dental Radiography". These codes were designed to serve as standards throughout Canada.

(d) Particle Accelerators

The Division has continued to serve actively on the Advisory Committee on Safety of Particle Accelerators. The Committee advises the Atomic Energy Control Board on health and safety requirements for the operation of these radiation producing facilities. The number of such high energy machines being installed in universities, hospitals, and industry continued to increase.

(e) Training Courses

Two training courses in basic radiation protection -- industrial radiography were conducted by the Division. By providing instructors, the Division also assisted in training courses arranged by provincial departments and other organizations. Two training manuals, "Radiation Hazard Control in Hospitals" and "Radiation Hazard Control in Industrial Radiography", were prepared for users of ionizing radiation. The Division continued to co-operate in training and examining industrial radiographers in the health and safety requirements for certification under Canadian Government Specification Board Standards.

(f) Reactor Environment Monitoring

Through membership on the Reactor Safety Advisory Committee, the Division has continued to keep a close watch on the selection of site, design and operation of nuclear reactors. Environmental studies were continued near the sites of the Chalk River reactors, the NPD (Des Joachims) power reactor and the Douglas Point (CANDU) reactor. Monitoring of the Whiteshell reactor site in Manitoba was started in May 1965.

(g) Radioactive Fallout

The monitoring of air, precipitation, soil, milk, wheat, drinking water and bone for radioactivity was continued. In general, fallout levels decreased during the year, although significant concentrations of the long-lived elements strontium-90 and cesium-137 remained evident. Following the Chinese nuclear test in May 1965, fresh fallout isotopes were observed in air and milk samples but the amounts were not considered significant and the short-lived activities decayed away in a few weeks.

The special study of fallout levels in the North was continued. It has been found that Northern residents who consume relatively large quantities of caribou or reindeer meat have larger amounts of cesium-137 in their

bodies. The study includes radioactivity measurements on human urine specimens and caribou meat samples.

Co-operative studies with other laboratories were extended both at a national and international level.

Data from the fallout programs are published regularly in the monthly report "Data from Radiation Protection Programs".

#### (h) United Nations Program

Samples of milk, pulse, wheat and soil from Pakistan were analyzed for strontium-90 under the United Nations' co-operative study of radioactive fallout.

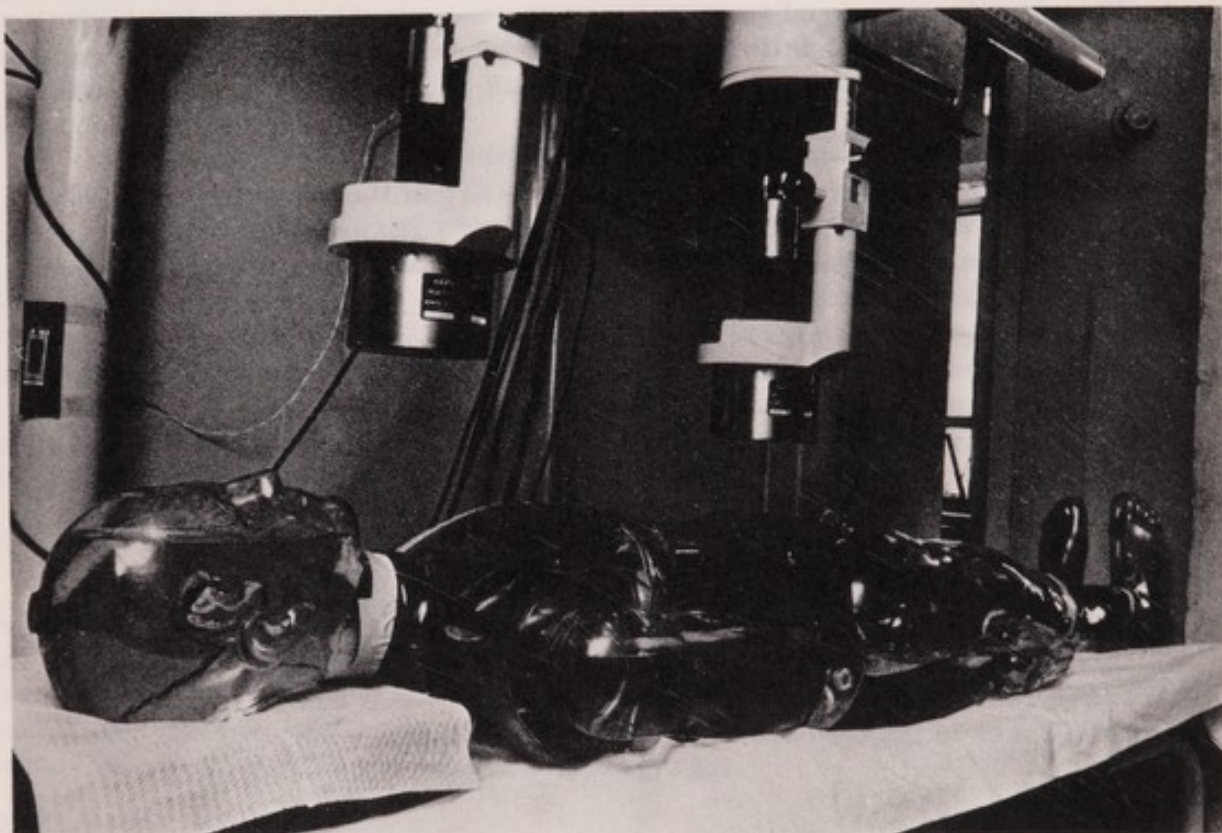
#### (i) Whole Body Counter

This facility was used to investigate the amount of cesium-137 in the bodies of Eskimos. This fallout component is present in relatively large quantities in those who eat substantial amounts of caribou or reindeer meat.

School students from Ottawa and members of RPD Staff were also measured to determine the amount of cesium-137 in their bodies.

A portable whole body counter was developed for use in remote areas.





This plastic figure is used to help calibrate the whole body counter of the Radiation Protection Division. The counter can measure the amount of certain types of radioactivity in a living human.

## MEDICAL SERVICES

Under Section 5 of the Act establishing the Department of National Health and Welfare in 1945, the duties, powers and functions of the Minister are defined as extending to and including all matters relating to the promotion or preservation of the health, social security and social welfare of the people of Canada over which the Parliament of Canada has jurisdiction and which are not specifically assigned by law to any other department of the Government of Canada. Specifically included are investigation and research into public health and welfare, inspection and medical care of immigrants and seamen, the supervision, as regards public health, of railways, boats, ships and all other methods of transportation, the promotion and conservation of the health of civil servants and other Government employees, the administration of certain specified Acts such as the Food and Drugs Act, the Quarantine Act, the Public Works Health Act etc., the collection, publication and distribution of information relating to public health and sanitary, social and industrial conditions affecting the health and lives of the people and, finally, co-operation with provincial authorities with a view to preserving and improving public health and the welfare of the people of Canada. Under this general authority, a branch of the department was organised on 1st January 1962, designated Medical Services, by the amalgamation of seven formerly independent services, charged specifically with the following duties;

(a) to administer the Quarantine and Leprosy Acts designed to prevent the entry and spread of Smallpox, Cholera, Plague, Yellow Fever, Epidemic Typhus, Relapsing Fever and Leprosy in Canada,

(b) to assess the physical and mental fitness of intending immigrants and ensure as far as is practicable that they do not introduce infectious diseases or are liable to become a charge on the state by reason of chronic ill health,

(c) to carry out the regulatory inspection responsibilities laid on the department under the Public Works Health Act and subsidiary legislation to ensure the hygienic safety of international and interprovincial means of transport, terminals and ports,

(d) to protect and promote the health of federal government employees and advise employing agencies on measures to achieve these ends and, in particular, to attempt to ensure that only persons physically and mentally suitable are

- (i) recruited to federal employment
- (ii) assigned to duties or posts calling for special standards of fitness or involving special hazard, such as northern or certain overseas posts or
- (iii) permitted to operate on civil aviation and
- (iv) to assess and advise on degrees of hazard in various situations in which government employees have to work,



(e) to organize services to promote and protect the health of the indigenous races and all residents of the northern territories so long as no other provincial or territorial health authority is in a position to assume such responsibilities,

(f) to organize diagnostic and treatment services for sick mariners where other arrangements are lacking,

(g) provide a medical service to the Canadian Coast Guard Service.

Recently some further responsibilities in connection with the prosthetics services, originally organized by the Department of Veterans Affairs for veterans, have been added.

There is nothing in the Act which places responsibility on the Minister of National Health and Welfare for medical services to Indians and Eskimos, except the general responsibility the Minister has in respect of the public health of the people of Canada. In view of the general responsibility vested by the Indian Act in the Government of Canada and the regulation-making authority contained therein, it has been the practice of the Department of National Health and Welfare to undertake duties relating to the medical and hospital care of Indians and Eskimos and other persons in the far North where such services are not otherwise readily available.

#### Organization

Responsibility and executive authority for directing the total program is assigned to the Director General of Medical Services who reports directly to the Deputy Minister of National Health. Assisted by and through a group of advisory professional and administrative staff officers, which meets monthly to discuss progress and policy matters, as well as being available individually for special consultation as need arises, he promulgates the policy guiding operations and maintains liaison with other branches of the department, other departments and agencies. Each advisory officer has special experience and competency in some particular aspect of the program but no direct executive authority. During 1965, the advisory staff officers included personnel with special competences in administration, financial management, quarantine work, immigration medical control, diagnostic and treatment services, hospital insurance, dental services, personnel management, civil service health problems, nursing services, public health programming, health education and in-service training, supported by a body of technical and clerical staff, systems design, record and library officers.

Control of the field program is decentralized onto six Regional Directors, the Director (Eastern Region) based in Ottawa, controlling operations in Ontario, Quebec, the Maritimes and Eastern Arctic; the Director (Central Region) based in Winnipeg, controlling operations in Manitoba and the Central Arctic; the Director (Saskatchewan Region) based in Regina, controlling operations in Saskatchewan; the Director (Foothills Region) based in Edmonton, controlling operations in Alberta, the Yukon and Western Arctic; the Director (Pacific Region) based in Vancouver, controlling operations in British Columbia and the Director (European Region) based in London, England, controlling operations, mainly immigration medical



control, in Europe. Regional Directors are responsible to the Director General and meet with him in united conference twice a year in Ottawa to map program developments. As the regions are large, each is subdivided into zones under the control of Zone Directors who are responsible to the Regional Director for the actual execution of the program by the staff assigned to them.

This organization was reviewed during 1965 and certain changes proposed, designed to align the regions more nearly with the provinces, to facilitate co-operation with provincial departments of health. These changes will be introduced during 1966 and 1967. During 1965, plans were made to create a separate region incorporating the two Northern Territories as these areas have problems of a nature peculiar to themselves. This plan becomes operative as from 1st April 1966.

### Facilities

In providing the services required to fulfill the responsibilities laid on Medical Services, it is a matter of policy to make use as far as practicable of any existing facilities by any negotiated agreement possible and only to provide federal facilities where local facilities are absent or not available. For example, in organizing diagnostic and treatment services for Indians or sick mariners, the services of local physicians, hospitals and clinics where such services are available are enlisted under agreed financial arrangements where co-operation can be arranged. In some areas and in some programs, however, this is not practicable and federal facilities have to be provided and federal employees posted to provide the services required. During 1965, Medical Services operated in Canada 16 hospitals, 36 Clinics, 43 Nursing Stations, 84 Health Centres, 54 Health Stations and, outside of Ottawa, 9 Civil Service Health Units. As more and more community hospitals are built and agree to accept Indian and Eskimo patients, the need for federal hospitals decreases and these are gradually being phased out or adapted to other purposes. During the year it was possible to phase out two obsolete hospitals at Clearwater Lake and Pine Falls and the closure of another is pending. On the other hand, the former Indian hospital at Fort Qu'Appelle has become, by negotiation, a general community hospital serving the whole population on a cost sharing basis. Nursing Stations are small rural hospitals with a few beds staffed by nurses, with physician services on call and mainly for maternity cases or holding cases pending transfer. Health Centres are staffed by public health nurses offering, as a general rule, only public health nursing counselling services but, in remoter areas where other services may be lacking or difficult of access, also some diagnostic and minor treatment services. Nursing Stations and many health centres are equipped with X-ray machines and radio telephones where line telephones are not available. Health Stations are small units set up and equipped for use of visiting physicians and nurses, not permanently staffed, located in remote, sparsely populated areas where it is impractical to post staff permanently. Although Medical Services do not operate ambulance services they frequently pay for them on behalf of indigent patients. In remote areas, mobile teams of physicians, nurses and dentists, often including specialists, equipped with portable equipment, make regular excursions and conduct surveys and special investigation. All units of Medical Services are equipped with the best available modern equipment necessary for the services given in that



unit. If need is demonstrated, Health Centres are upgraded to Nursing Stations. One was upgraded in 1965 at Fort Franklin.

## THE OTTAWA BUREAU

The Ottawa Bureau was formed in 1963 by the grouping together of the original Civil Service Health Division, the Civil Aviation Medical Examiner Services of the former Civil Aviation Medicine Division with its responsibility for advising the Department of Transport on the application of Physical Standards for Civil Aviation Personnel Licensing and latterly the Quarantine and Immigration Medical aspects of the Ottawa International Airport operation at Uplands. The plan to transfer the Preliminary Screening Section of Quarantine, Immigration Medical and Sick Mariners Services has been cancelled with the move of this Section to the new Brooke Claxton Building at Tunney's Pasture. The reorganization cited above provides more unified and efficient administration and as well has led to more economical and effective use of both staff and clinical resources within the headquarters or Ottawa area. In keeping with the overall change in titles for senior officers within both the Department and Medical Services the title, Chief, Ottawa Bureau, was changed to Director in October of this past year.

## CIVIL SERVICE HEALTH DIVISION

### Administration

The headquarters and Medical Centre remain located in No. 3 Temporary Building but plans are afoot for the Ottawa Bureau to move to spacious new quarters conveniently situated in centretown. The Division continues to administer three basic classes of service. First, a broad advisory and consultant service to all government departments and a number of crown companies, corporations and commissions on employee health and welfare matters. Secondly, through 25 full-time and 4 part-time health units, a nursing counsellor service is provided in whole or in part to almost 39,000 federal government employees within the Ottawa area. Thirdly, through its clinical resources at the Medical Centre, the Division affords advisory, diagnostic and emergency medical services to over 40,000 federal employees in the Ottawa area. Outside Ottawa, similar services to a lesser extent are provided employees upon departmental request utilizing the facilities of Medical Services where these are available or, otherwise by arrangement with the Department of Veterans Affairs or, as necessary, private physicians on a fee-for-service basis.

Much planning has taken place over the past few years in respect to the further extension of the Civil Service Health program, particularly the nursing counsellor service, to large centres outside Ottawa. The Director of the Bureau and his professional staff act in an advisory and consultant capacity on the extension program in general and more specifically to the medical and nursing staff of the regions and zones in the further development of the nursing services previously transferred to or established by Medical Services. Regions and zones within Medical Services continue to study the health unit requirements and submit pre-estimate proposals accordingly. The criteria require a minimum of 1,000 federal government employees concentrated in one or more federal government buildings within a circumscribed area, suitable space in a desirable location, an available well-qualified



public health nurse with previous experience or a genuine interest in occupational health nursing, adequate nursing supervision and medical direction with essential referral facilities. Additional factors such as the nature and type of occupational hazards, general working conditions, overcrowding and the accessibility of community health and welfare resources would all have a bearing on establishing priorities. Large centres such as Vancouver, Edmonton, Calgary, Winnipeg, Toronto, Montreal and possibly Halifax meet the basic criteria for such extension.

#### Medical Centre Services

The services recorded represent a 20 per cent increase over that of the previous year. Referrals from health units, pre-employment examinations where an assessment of physical fitness is required, medical examinations and psychological assessments required by statute under the Public Service Superannuation Act, the Foreign Service Regulations and the Isolated Posts Regulations, and periodic voluntary examinations requested by departments for special employee groups continue to constitute the bulk of the clinical services conducted at the Medical Centre. The special groups referred to above include employees assigned each year to summer field work, those engaged in especially hazardous occupations such as exposure to radioactive materials, selected groups of senior executive personnel, and lastly special eye examinations for employees whose work entails optimum visual acuity and depth perception. Here, the Chief of the Medical Rehabilitation Division, Health Services Directorate, continues to act as a consultant in ophthalmology to both major programs within the Ottawa Bureau.

The clinical and advisory services provided the Departments of External Affairs and Trade and Commerce continue to occupy almost one-third of the total available medical officer time for medical examination work. Hardship point ratings based on information contained in post reports from the United Kingdom and U.S. respectively have been assigned for new missions established in Dakar, Senegal and Addis Ababa, Ethiopia. Minor revisions in the Post Rating forms to Sections IV and V under Health and Medical Care respectively have been made for Accra, Ghana; Bogota, Colombia and Santo Domingo, Dominican Republic during the year. The Division continues to assume responsibility for medical arrangements required by assignees and their dependents posted abroad under various government aid programs administered by the External Aid Office and acts in an advisory capacity on similar medical arrangements to the Canadian University Service Overseas organization (CUSO). Lastly, one minor change in policy respecting routine psychological assessments occurred early in the year. Whereas formerly, routine assessments of all clerical, stenographic and communicator personnel were conducted prior to posting, in January the Division agreed to forego such assessments routinely except when specifically requested by the Department of External Affairs, the Civil Service Commission or referred by the medical staff of this Division following the routine medical examination required as a condition of posting.

The psychiatrist continues to carry a heavy load in both his consultant and advisory capacities. In the former he has held some 536 consultations with employees. In addition some 128 interviews were held with departmental personnel and administrative officers in connection with the investigation



and solution of problem cases. In his advisory capacity to government departments he has continued to further develop an educational program for the prevention of mental illness and the promotion of better health in the federal civil service. As a member of the Advisory Committee of the Ottawa Branch of the Alcoholism and Drug Addiction Research Foundation of Ontario, he has provided leadership and direction in the program to combat alcoholism in the federal public service, both within and outside Ottawa.

The psychologist, as in previous years, continues to work most closely with the psychiatrist, medical officers and nursing counsellors in the assessment of departmental and pre-employment referrals and in the conduct of his overall program. During the year a total of 915 interviews were held either at the Medical Centre or in health units. The total remains approximately the same as in the previous year despite the minor change in policy respecting routine psychological assessments for foreign service personnel cited above. This change has freed the psychologist enabling him to accept more referrals from nursing counsellors in health units. This factor together with the weekly medical officer visits to health unit areas has also allowed the Division to make more meaningful its policy of providing a voluntary psychological service to as many employees as possible.

In order to bring the medical advisory and consultant services of the Medical Centre closer to management, senior administrative officers and supervisors, the Division embarked on a medical officer deployment program whereby medical officers from the Medical Centre staff would visit lay health units located in the midst of the four main building complex areas on a one-day per week basis. The medical officer is able to give on-the-spot medical direction to the nursing counsellor and as well there has been a considerable reduction in time loss in referring employees to the Medical Centre.

There has been an increased demand by several departments for participation in the periodic executive health examination program commenced in 1955. At present approximately 400 senior government officials from thirteen government departments receive complete medical examinations biennially. In an effort to extend this service to all government departments in the Ottawa area a survey was made early in the year of our present medical examination workload. It was interesting to note that only about 5 per cent of the total medical officer time available for medical examination work is presently allocated or required for periodic executive health examinations. The results of this survey indicate that with our present medical staff and without reducing the scope and variety of clinical service, it is possible to extend the program to other government departments in Ottawa provided such were offered from the divisional head level up. Extension of the program to cover an equal number of senior officers from the Administrative Officer 8 and related class level up seems desirable but would require additional medical staff.

A total of 8,347 immunizations were administered at the Medical Centre to some 3,447 individuals, mainly foreign service personnel and dependents posted to overseas stations or to isolated regions. This total represents a 25 per cent increase over that of the previous year largely due to smallpox and yellow fever vaccinations. Included is a special yellow fever vaccination project carried out in March at RCAF Station Uplands.



The transfer of the expanded and reorganized Medical Review Section to No. 3 Temporary Building has greatly facilitated the review and assessment functions common to both major programs within the Ottawa Bureau. One medical officer continues to be responsible for these functions as they relate to Civil Service Health. The work of this Section continues to increase in volume reflecting the ever expanding use being made of the Ottawa Bureau's medical advisory services by federal departments, boards and agencies. During the year this Section reviewed and processed 117,756 Physician's Certificates of Disability for Duty and 10,639 physical examination record forms requiring issue of medical interpretation forms. Also some 965 medical examinations were arranged for outside Ottawa for physical assessments of employees required by statute, requested by employing departments in the interest of employee health or suitable job placement.

At the request of the Department of Transport the Ottawa Bureau undertook to develop standards for students accepted for training as deck or engineering officers at the new Canadian Coast Guard College opened at Sydney, N.S., in September. Arrangements were made for some 142 applicants to be medically examined in their home localities. Subsequently they were screened and approximately 40 selected for the four-year course. Annual examinations will be continued for new recruits for this College.

#### Special Activities

Two additional special activities are worthy of note. First, early in the year the Bureau reviewed the inspection policies in respect to the eating establishments in federal government buildings. Following discussions with the officials of the City Health Department of Ottawa, Eastern Region and Public Health Engineering Division of this Department, existing arrangements for routine inspections of these eating establishments were strengthened and co-ordinated. Secondly, the Director of the Bureau undertook a survey of existing health services and first aid facilities at major airports across Canada. Considerable information on this subject has been obtained from the appropriate officials of the Department of Transport and this information has been assembled with a view to the adoption of a set of minimum standards for the provision of essential medical emergency services at airports. This report will be complete early in the new year.

Within Ottawa as federal government employees continue to shift from older buildings to new quarters consequent changes in the location and operation of health units have taken place. After eleven years Health Unit No. 13 at Victoria Island, Department of National Defence, became a part-time unit. Health Unit No. 15 in the Blackburn Building, Sparks Street, was discontinued after fifteen years' service. The part-time service provided in the Mortimer Building, Nicholas Street, was discontinued after three years. On the other hand one new unit was opened in the newly constructed Sir Wilfred Laurier Building, Laurier Avenue West, for approximately 1,000 employees of the Department of Labour. New units are planned for the MacDonald Building on Slater Street to serve employees of the Department of Industry and Department of Defence Production, the Headquarters RCMP, Alta Vista Drive, and as well negotiations for space in the Centennial Towers Building are underway by the Department of Indian Affairs and Northern Development. Lastly, a new one-nurse health unit will be established in the new



Sir John Carling Building, Carling Avenue, for the new Department of Agriculture Headquarters scheduled to open late next year.

During the year a series of orientation conferences were arranged for the nine new nursing counsellors. As in previous years key health units in Ottawa have provided field work for postgraduate nursing students. Two students from McGill University remained for one week each and two students from the University of Ottawa remained for two weeks each and an administrative student from the University of Toronto spent two weeks with the Ottawa Bureau.

#### CIVIL AVIATION MEDICINE

During the year 1965 the work of the Civil Aviation Medicine program of the Ottawa Bureau has continued to increase. The total number of pilot medical examinations reviewed was 26,121 which is an increase of nearly 5,000 over the previous year. Similarly the number of electrocardiograms reviewed amounted to 3,693 up from 2,034. These examinations were carried out by 479 Department of Transport Medical Examiners across the country and forwarded for initial review to one of the six Regional Offices and then to Headquarters in Ottawa. The medical examiners continued to be appointed by the Department of Transport which acts upon the advice of this Bureau. Fifty-one new examiners were appointed and 48 struck off strength for various reasons including full-time occupation in other fields of medicine, change of address, and death.

Of the 26,121 medical examinations carried out 431 resulted in downgrading of the pilot's medical profile. It has been the practice of the Regional Medical Officers to refer difficult or contentious medical cases to Headquarters for review and after being considered by the Staff Medical Officer and the Medical Consultant, they are referred to the Ottawa Bureau Medical Review Board if there is a question of the pilot being declared "unfit" to hold a licence. During the year 1965, 104 cases were considered at the weekly meetings of the Board which is composed of the medical staff of the Ottawa Bureau. Eleven related to hypertensive cardiovascular disease, 29 to other conditions of the heart and blood vessels and 15 were due to psychiatric disturbances. The visual problems amounted to 19. Other conditions included peptic ulcer with complications, arthritis, renal disorders, ulcerative colitis, diabetes and orthopedic disorders.

During the year a program of Regional Medical Officer orientation was begun. It is intended to have each Regional Medical Officer spend three to five days with the Ottawa Bureau on an annual basis. Such visits enable the Regional Medical Officers to meet Headquarters personnel and to discuss the problems that occur in the field. Two Medical Officers have already made these brief visits to Headquarters.

#### Ottawa International Airport

More than a year ago the Ottawa Bureau assumed responsibility for the Quarantine and Immigration Medical aspects of the Ottawa International Airport operation at Uplands. Throughout the past year these services have been performed under the competent direction of a part-time medical officer.



In all 132 aircraft were cleared, 383 immigrants examined and 181 small-pox vaccinations administered by this medical officer at the airport.

## QUARANTINE CONTROL

The Quarantine Service is operated under authority of the Quarantine Act and Quarantine Regulations and in conformity with the International Sanitary Regulations to which Canada has subscribed without reservation since 1952. It is operated for the purpose of minimizing the hazard of entry of infectious diseases into Canada through international traffic; primarily entry of the major quarantinable diseases Smallpox, Cholera, Plague, Yellow Fever, Typhus and Relapsing Fever but also for protection against entry of other contagious disease and to assist in international control of communicable disease. Information received at Head Office from the World Health Organization, offices of Medical Services abroad and other sources, relating to the world-wide incidence of communicable disease is made available to Quarantine Stations across the country. On the basis of this information appropriate protective measures are applied. Ships, aircraft and persons arriving in Canada from abroad are regularly inspected. These functions are performed at major ports and airports by professional personnel employed full time and at ports and airports receiving a lesser volume of international traffic by personnel employed on a part-time basis. Inspection of arriving persons and their immunization documents is carried out to detect persons who might be ill or incubating quarantinable disease and of aircraft and ships to protect against entry of rodents or insect vectors of disease.

During the year under review 10,070 aircraft and 7,591 ships were so inspected. A total of 1,289,856 persons were inspected, 12,081 persons were vaccinated against smallpox on arrival and 4,151 persons were placed under surveillance for smallpox. No case of major quarantinable disease was imported into Canada during the year. One person placed under surveillance on arrival was subsequently suspected to be suffering from smallpox but laboratory investigation eliminated this possibility.

Across the country eight ports suitably staffed and equipped are designated in application of the International Sanitary Regulations for the issuing of Deratting or Deratting Exemption Certificates. In addition seven ports are designated for the issuing of Deratting Exemption Certificates only.

Yellow Fever Vaccinating Centres which are registered with the World Health Organization are operated at departmental expense in major cities. One additional centre was established during the year making a total of 19. As a service to the travelling public 10,795 persons were vaccinated against yellow fever at these centres.

International Certificates of Vaccination in the approved World Health Organization form are supplied free of charge to the travelling public. In co-operation with Information Services information relating to immunization requirements for international travel is also made available to the general public.



in all circumstances, the Committee shall be guided by the principle that the health of the community is the paramount consideration.

The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

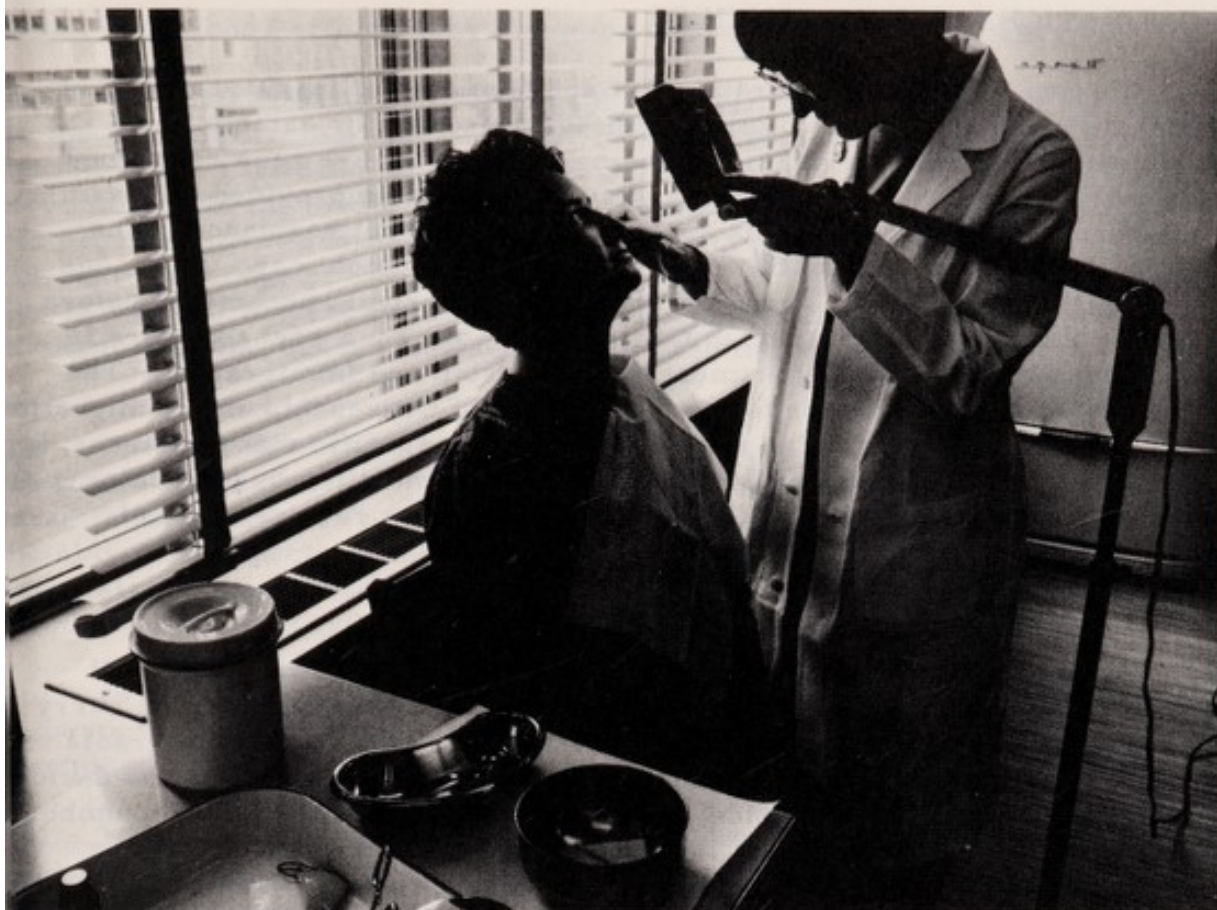
The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

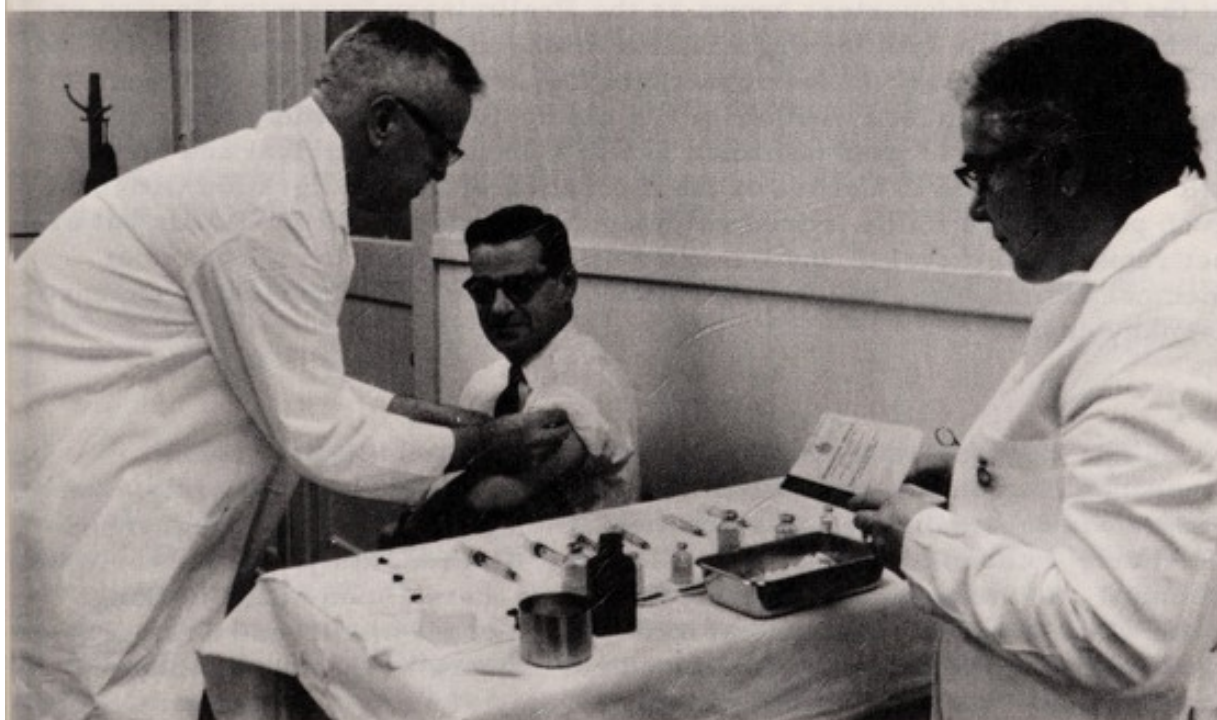
The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.

The Committee shall be empowered to make such recommendations as it may deem fit to the Government and the public.



Civil Service Health nurses of the Medical Services Directorate help to maintain the health of employees of the federal civil service. Here a nursing counsellor removes a speck of dirt from a patient's eye.



Smallpox immunizations are part of the preventive medicine program undertaken by the Quarantine Service of the Medical Services Directorate.



## IMMIGRATION MEDICAL SERVICES

Section 21 of the Immigration Act and Section 5 of the Department of National Health and Welfare Act provide the authority for establishing immigration medical services. Intending immigrants are required to be examined abroad before departure and authority is also provided for examining persons already in Canada applying for permanent residence. The duty is also laid on Medical Services of providing medical care to persons who are ill on arrival in Canada or who, well on arrival, became ill before reaching their final destination in Canada and to persons whose welfare is the responsibility of the Department of Citizenship and Immigration. The Service also acts as adviser to the Department of Citizenship and Immigration in all health matters affecting immigrants and, in specific circumstances, assists individual Canadian industries and local authorities by examining candidates for employment by the standards of fitness required by that particular industry.

In Canada, Medical Services professional staff are stationed at all major sea and airports and other major inland centres specifically to carry out these duties. They arrange or supervise the treatment of immigrants and conduct the medical examinations of those temporary visitors who decide to apply for permanent residence, of whom there are always a large number each year. They also complete the examination of immigrants who have been processed through the method of examination abroad known as "preliminary screening". This has been devised to ensure that immigrants living in parts of the world far removed from Canadian facilities will have reasonable hope of meeting Canadian health standards and is operated through local physicians reports. These medical reports from foreign doctors, not always conversant with Canadian standards, are submitted to a special unit at the Ottawa Headquarters known as the Preliminary Screening Section or to the appropriate similar organization at one of Medical Services overseas offices. After review of the report, the Department of Citizenship and Immigration is advised whether or not the applicant for immigration is considered likely to pass Canadian health standards on arrival and may be allowed to proceed to Canada at the discretion of the Immigration Officers. Such persons are liable to medical examination on arrival in Canada but are not required to travel to any Canadian office abroad for the purposes of medical examination, which might entail hardship and unnecessary expense in many cases.

The Headquarters of the European operations is located in the Macdonald Building in Grosvenor Square, London, England. Twenty other offices are located in five other British cities and in Austria, Belgium, Denmark, Finland, France, West Germany, Greece, Italy, the Netherlands, Portugal and Switzerland. The Services also maintain an office in Hong Kong which oversees the medical examination of all immigrants from Far Eastern countries. The Canadian medical officers at these posts control examinations over wide areas. In April - May of 1965, the Medical Officer at Berne, Switzerland carried out a scheme for examining 915 persons in Morocco.



## Other Functions Performed by Canadian Overseas Medical Officers

- (a) The Medical Officer in Charge of each office serves as Medical Attaché to the Canadian Embassy. He keeps in close contact with local health authorities and is notified of any outbreaks of quarantinable diseases or major epidemics. In the former case Ottawa Headquarters is notified by cable. He provides the Ambassador and his staff with medical advice based on current knowledge of local health conditions. In London the Regional Director is Medical Attaché to the Office of the High Commissioner and serves as a member of the London Advisory Committee to Treasury Board.
- (b) Special examinations are conducted on recruits for the Canadian Forces at the request of the Joint Staff. In conjunction with an immigration examination advice is provided to various specific industries in Canada, notably on prospective employees of the Ontario Mining Industry and the Protestant School Board of Greater Montreal. Examinations are also conducted for the Civil Service Health Division on Canadian personnel.
- (c) In many European centres medical officers arrange examinations and reports for the Department of Veterans Affairs on Canadian pensioners residing in these countries.
- (d) Medical officers in various countries have arranged with local health authorities for the exchange of information on the adverse affects of drugs. This information is forwarded to the Food and Drug Directorate in Ottawa.
- (e) The Medical Officer in Charge of our Paris office serves part-time in the Emergency Health Service and represents that Service at N.A.T.O. Headquarters in Paris.
- (f) On occasion medical officers in Charge of our offices arrange meetings between Canadian provincial health officials and health authorities of various countries. This has occurred several times during the past year chiefly in connection with social welfare legislation. Provincial health officials wished to obtain information on the social services available in various European countries, notably regarding hospitals, medicare and pensions.
- (g) Periodically the Medical Officer in Charge of each post attends meetings at the Embassy to discuss adjustments of pay allowances and working conditions of locally engaged staff.
- (h) A Health Unit has been established in the Macdonald Building equipped with facilities for medical treatment. In the adjoining room there are two hospital beds for emergency use and a third bed has been provided at Canada House. The Health Unit is staffed by a Canadian nurse who is available for consultation from 9.00 a.m. to 10.30 a.m. and on call at other hours during the day. One of the medical officers in the London office is always available on call. Five hundred and seventeen people received attention in the Unit during the year and 53 of these were seen by a doctor. One hundred and fifty vaccinations against smallpox were carried out and 62 other inoculations. Nineteen blood specimens were drawn on Canadian Military recruits.



## Local Physicians

A large number of local physicians have been authorised to do examinations in various countries the fees being paid by the persons examined, except where indicated. This permits intending immigrants to be examined at their own expense in their own locality rather than visiting one of our offices. Reports are forwarded by the local physicians to an area office where they are reviewed and completed by a Canadian medical officer. These local physicians are divided into three groups:-

### Roster Doctors

Applicants who have been examined by a Roster Doctor are not ordinarily re-examined at the port of entry into Canada.

### Local Examiners

Applicants examined by local examiners are subject to a spot-check examination at the port of arrival in Canada. Local examiners generally do not have the experience of Roster Doctors.

### Preliminary Screening

In North Africa, behind the Iron Curtain and areas outside Continental Europe local examiners are appointed in some centres, in others prospective migrants are directed by members of the Canadian Embassy or British Embassy staff to physicians who forward reports to the designated area office for pre-screening by Canadian medical officers. These applicants are subject to re-examination at the port of arrival in Canada.

### Work Load

During 1965 there was a total of 164,965 examinations and re-examinations conducted in the Region compared with 116,279 in 1964, an increase of 48,686 (41.8%). The Immigration Department had hoped for an increase of approximately 20% to 25% on the 1964 figures so that our work load increased beyond expectations. The Immigration Department increased their promotional campaign in all areas and this, together with reports of increasing prosperity in Canada coupled with a slowing down of the economy in some European countries, has no doubt accounted for the increase. However, in some countries in spite of a shortage of workers, notably the United Kingdom, the numbers examined showed an unexpected increase. The most notable increases were in Switzerland, Germany and Italy.

The number of examinations conducted in Canadian offices during the year was 142,115, an increase of 37,680 (36%) over 1964. Roster Doctor examinations increased by 298 (6.7%) from 4,725. Locally appointed physicians and pre-screening examinations were 18,125, an increase of 10,708 (104%). These latter figures are not strictly comparable to the 1964 figures as pre-screening work for Iron Curtain countries was only transferred to the European Region late in 1964. Furthermore, the designation Locally Appointed Physician was adopted about the same time.



## Accommodation

In all offices accommodation is shared with the Department of Citizenship and Immigration and, excepting in London, the rent is shared equally, as are all other costs common to both Departments. In London the Canadian Government owns the building occupied but in all other posts the accommodation is rented. In Malta and Latina working space is provided by local authorities. At many posts accommodation occupied was inconvenient and unsatisfactory and the policy of the Department of Citizenship and Immigration has been to improve accommodation in these posts. During 1965 new accommodation was obtained in Glasgow, Berne and Copenhagen and a new office was opened in Milan.

## SICK MARINERS SERVICES

The treatment of sick mariners is authorized by Part V of the Canadian Shipping Act and constitutes the oldest form of insured "medicare" in Canada. This Act provides for a compulsory levy of two cents per net register ton on all vessels arriving in Canadian provinces from foreign ports or from another Canadian province. This duty is collected not more than three times in one calendar year and the initial payment can not be less than \$2.00. The total due in any one calendar year is calculated as six cents per register ton or \$2.00 should the former be less. The levy is compulsory for foreign shipping but voluntary for fishing vessels of Canadian registry. In respect of this primitive type of medical insurance premium, a medical service is provided to all members of the crew of an insured ship who fall ill or are injured, by the Government of Canada. Treatment is supplied at Sick Mariners Clinics staffed by full-time medical and nursing personnel with supporting staff at major seaports. In ports of medium size port physicians are engaged on a part-time salary basis and in smaller ports physicians are engaged on a fee-for-service basis. The trend has been towards engaging local practising physicians on a fee-for-service basis wherever possible and diminishing the number of part-time salaried port physicians. As an increasing number of seamen are now covered by some other form of hospital insurance plan, the need for this service has somewhat diminished. However, the service still covers all ports and outposts of both coasts of Canada and the port of Churchill on Hudson Bay. It does not now operate west of Montreal on the inland waterways. Full time clinics are now at the ports of Sydney, Halifax, Saint John, Quebec, Montreal, Vancouver and Victoria but not at Toronto or any port on the Great Lakes. Part-time physicians are employed at St. John's, Lunenburg, Liverpool, North Sydney, Tracadie, Port Alfred and Port Alberni. Department of Veterans Affairs hospitals are designated for hospital care of sick mariners where they exist. Elsewhere the hospital facilities existing in the locality are used, Medical Services meeting the costs where the patient has no other insurance coverage. Where the patient's insurance provides for co-insurance charges, these are met by Medical Services.

## INDIAN HEALTH SERVICES

With the exception of the European region, the main work load in all Medical Services Canadian regions is still in regard to the care of Indians and Eskimos. Medical care, public health services and dental services are



provided, both directly by full-time personnel of Medical Services and indirectly by hiring locally available services where such are available. Indians, like everyone else are expected to contribute according to their ability towards the cost of their own medical services but relatively few are in a financial position to make any very significant contribution. For hospital services, all Indians are now included under the provincial and territorial hospital insurance plans and eleven Indian Bands, mainly in Ontario, have now taken steps to insure themselves under various medical care insurance plans. Where a Band cannot meet the full cost, Medical Services supplements the contribution made.

### Treatment Services

The expansion and modernization of treatment facilities continued during 1965. A Nursing Station was opened at Fort Franklin on Great Bear Lake which has long been a problem area on account of poor communications and difficulties in evacuation of patients. A new portable type of Nursing Station was devised and installed at Rankin Inlet on Hudson Bay to replace the old mine bunkhouse hitherto used as a Nursing Station. The success of this portable design has made it possible to establish Nursing Stations in unstable communities where the cost of building permanent facilities has been a major obstacle and several more of these are scheduled for installation during the coming year. The inadequate Nursing Station at Aklavik was also replaced by a modern facility in 1965. The marked improvement in Eskimo infant mortality achieved during 1964 (down below 100 per 1000 live births for the first time in history) followed the opening of Nursing Station and other treatment facilities in remote areas hitherto without benefit of constant professional attention. It is expected that further improvement will follow as the network of treatment facilities continues to expand.

During 1965, a "Guide on Treatment for Nurses and Lay Dispensers" was produced and distributed widely. Arrangements were made to improve communications between outlying settlements and base areas so that medical advice could be provided promptly to Lay Dispensers faced with a medical problem and earlier evacuation of patients arranged when necessary.

In July 1965 the cornerstone of the new Charles Camsell Hospital was laid and construction has proceeded rapidly. The improved facilities with services to be available at the new hospital will be of great assistance in providing better care to the residents of the Yukon and N.W.T. as well as the native population of Northern Alberta.

### Public Health Services

On most Indian reserves all public health services are still provided by full-time personnel of Medical Services. In Nova Scotia, however, the provincial health units provide most of the services, assisted by Medical Services nursing personnel. In British Columbia the provincial health units have assumed full responsibility for one third of the Indian communities where these are conveniently adjacent to the other communities for which they are responsible. During 1965 one Indian community on the north shore of Burrard Inlet opened negotiations to incorporate themselves into the North Vancouver Municipality. In Western Ontario, yet another provincial health



unit has assumed responsibility for the adjoining Indian reserve, even going as far as to have special legislation passed by the Ontario Government to enable them to do so. The situation in Quebec is under active discussion between the Federal and Quebec Governments. Formal agreement was signed on April 1st 1964 between the Director of Medical Services and the Deputy Minister of Health for Manitoba whereby the Provincial Northern Health Service would provide all public health services for Indians at Moose Lake, Grand Rapids, Cedar Lake and Churchill while Medical Services would provide public health services to the non-Indian population in The Pas and Norway House areas. This was a straight division of responsibility for services on a geographic basis and no financial adjustment was included. By a cost sharing agreement, Selkirk Health Unit provides health services to the Fort Alexander and Scanterbury Indians. As already mentioned, in Saskatchewan, agreement has been reached with the provincial authorities regarding joint use of the Medical Services hospital at Fort Qu'Appelle. Close co-operation and consultation on public health control measures has been achieved.

Almost a quarter of all Canadian Indians reside in Ontario, 20% in British Columbia, Manitoba and Saskatchewan each have 14%, Alberta and Quebec each 11%. Over 2% of Indians reside in the Northwest Territories and a little over 1% in the Yukon. Nova Scotia and New Brunswick each have Indian populations comprising some 2% of all Indians. In 1965 the Indian population rose to 211,389 or a little over 1% of the total population, an increase of over 3% on 1964. The crude birth rate has been slowly declining since 1961, when it was 41.43 per thousand of population, and is now under 40 per 1,000 of population. Despite this decline, the natural increase has remained remarkably steady at 3% annually and has risen slightly to 3.04%, accounted for by the fact that the infant mortality has dropped from 83.03 per 1,000 live births in 1960 to 61.5. This rate is still high and leaves no room for complacency but it does show a dramatic improvement amounting to almost a 25% decrease in five years. It is interesting that the Indian neonatal and perinatal death rates (22 and 32 respectively) are not so markedly greater than the comparable Canadian rates (18 and 28 respectively). Between 95 to 98% of all Indian births now take place in hospitals or nursing stations under competent professional supervision and increasingly Indian women are availing themselves of pre- and post-natal clinical services. The excessive infant mortality occurs during the middle and later months of infancy and continues into the second year of life. Mortality amongst Indian children aged 1 and 2 years is some eight times the national death rate for children of those ages. Mortality during adolescence and early adult life, particularly amongst females, is also excessive. Amongst women aged 15-34 years, Indian mortality is four times that amongst other Canadian women and is due to causes other than associated with childbirth, mainly respiratory diseases and accidents. This should not be read to imply that repeated child bearing does not influence this mortality, only that complications of delivery do not directly kill Indian women at a rate much greater than all Canadian women. In later life, Indians, particularly males, do not die any more rapidly than other Canadians so that the excessive mortality shown amongst Indians occurs entirely in infancy, early childhood, adolescence and young adult life. Respiratory diseases and accidents are the outstanding causes of death, accounting for some 40-45 of all Indian deaths annually with remarkable consistency over the past five years.



Nevertheless, the crude death rate from all causes has declined from 10.75 per 1,000 population to 9.3 over the past five years, mainly as a result of the declining infant mortality. Expectation of life at birth, in the case of both males and females, is approximately ten years less than for all Canadians, due mainly to the increased risks of dying in infancy or early life. Relatively speaking, in comparison with Canadian females, Indian female chances of survival are slightly lower than those of Indian males as compared with Canadian males at nearly every year of life. The average age at death for males is 33.67 and for females 36.82, but rises to 50 and 53 respectively if deaths in the first two years of life are excluded. The vital index or ratio of births to deaths is 4.2746 births: 1 death.

The above figures relate to the registered Indian population as a whole but Indians in different parts of the country present widely varying health pictures. Indians in the eastern provinces are characterized by a relatively low birth rate, not much in excess of provincial rates, quite moderate infant mortality as compared with other Indians and low to average crude death rates. Indians on the central plains, however, are characterized by exceedingly high birth rates, one group in Northern Saskatchewan alone contributing as much as 10% of all Indian births in Canada. Except in Southern Alberta where the infant mortality is no greater than in the province as a whole, this high birth rate is associated with a high infant mortality and, consequently, a high crude death rate. The fertility rates of Indian women in Eastern Canada are not markedly higher than those of non-Indian residents of the province but prairie Indian women have fertility rates twice and more than that of other Canadian women, in fact, in Saskatchewan, almost every third woman capable of bearing a child appears to do so annually. Indians in British Columbia have average Indian birth and fertility rates but a disappointingly high infant mortality and significantly high death rates in adult life. Indians in this province show an excessively high mortality from accidents, shared with Indians in Nova Scotia to a lesser degree, possibly associated with maritime pursuits although this has not yet been clearly demonstrated. Canadian Indians thus show three quite distinct health patterns and problems, each requiring special measures.

#### Dental Services

The Department of National Health and Welfare through its Medical Services, provides dental services to Indians and Eskimos under definite terms and conditions. Each year, Parliament appropriates a certain sum of money for the provision of public health and essential dental and medical care, through Medical Services to assist Indians and Eskimos who are isolated or indigent. During the fiscal year 1964-65, a sum of \$258,000 was spent by Medical Services for "Dentists and Dental Surgeons' fees" as against \$212,000 during the 1963-64 fiscal year.

The relationship of the Division of Dental Health to Medical Services is no longer entirely advisory. In the interests of the Indians and Eskimos and the efficiency of the program, including the morale of the dental officers, some decisions respecting the practice of dentistry including program planning and implementation are now made by dentists. At headquarters the Public Health Dental Officer of Dental Health Division has some administrative duties and technical supervision over the dental program and on policy matters



acts in an advisory capacity. Each Region has a Regional Dental Officer responsible to the Regional Director for the planning and administration of dental health programs to be executed in each zone through Zone Dental Officers. On an average, each Zone Dental Officer spends 25 hours a month travelling or setting up equipment, 72 hours for treatment services and the balance of his time for the keeping of records, the preparation of reports, laboratory procedures and to some extent when possible, dental health education.

Medical Services have static dental clinics in hospitals such as: Camsell Indian Hospital, Norway House, Sioux Lookout, Frobisher Bay, the Zone Office in Calgary, etc., where Zone Dental Officers are based and operate, and from which they travel to remote and sparsely settled areas in the field. Under some circumstances Medical Services assists in arranging necessary dental treatment for adolescents and young adults who are undertaking a training course under the sponsorship of the Department of Citizenship and Immigration, Northern Affairs or Territorial Governments. In all such cases prior approval must be obtained except for emergency treatment. Remuneration is in accordance with a Schedule of Dental Fees which is presently being revised. In some areas dental practitioners are employed on a per diem basis to supply dental services in residential schools. In remote areas the white population may obtain dental care from the Departmental dentist but are expected to pay the Crown for such services in accordance with the fee schedule. For children under the age of 17, whose parents are unable to pay for private dental care or who live in isolated areas, an attempt is made by Medical Services to provide or arrange preventive and essential basic dental care services. In many parts of Canada these services are rendered by full-time dental officers who visit the schools on the Reserves and in some other communities. Each one of these Dental Officers saw per month an average of 180 patients, performed 103 mouth examinations, 15 prophylaxis, 72 fillings, 114 extractions and some 41 other treatments including the topical application of fluorides, periodontal treatments and the provision, repair or rebase of the odd prosthetic appliance.

In some areas the Regional Dental Officer has, with the approval of the Director, arranged basic dental care (prophylaxis, necessary fillings and extractions) by private dentists, for children under the age of seventeen years whose parents cannot pay all or part of the costs of treatment. In one of the regions over 40 private dental practitioners have thus supplied basic dental care. Children aged 10 years and under may be provided necessary dental care at public expense, without prior approval, where the total costs of such treatment for any one child do not exceed \$25 during a calendar year. However, in those districts periodically served by a Departmental dentist, any treatments rendered to native children by a private dentist ordinarily should be limited to emergency care, for the relief of acute pain or infection, unless the parents are prepared to accept financial responsibility for payment. When the cost of treatment exceeds \$25 in any one year, or elective dental procedures are rendered to children aged 11 or older, accounts from private dentists are accepted for payment at public expense only if and when prior approval to undertake treatment has been obtained.

In the Yukon, a pilot program includes a New Zealand trained dental nurse who works under the direction of three private practitioners. Diagnosis







A nurse of the Indian Health Services visits and counsels an Indian family at Sioux Lookout, Ontario.



and treatment planning are done solely by the dentist, while preventive prophylaxis and certain treatment services as well as dental health education are provided by the dental nurse. A recommendation has been made that two dental hygienists be employed to expand the dental program at that location.

A dental section was prepared and published for inclusion in the Medical Services "Guide to treatment for nurses and lay dispensers". This dental section is a technical paper comprising information on technique, their functions, classification, and common characteristics, as well as general instruction for the extraction of teeth and dental anaesthesia. It includes contra indication for tooth removal, complication which may arise, post extraction advice to be given to the patient and other instructions concerning the prevention of the need for extraction. Some thirty illustrations are included to describe the instruments and techniques advocated. This section of the guide is to be used to instruct nurses and lay dispensers of Medical Services who may be called upon to provide emergency relief of pain and/or infection of dental origin, in remote isolated areas where and when a dentist is not available. Other sections of the guide cover medical problems of varying degrees of severity. These are all situations with which the nurses and lay dispensers have been required to deal in the past. Formerly, directions have often had to be provided by radio only.

#### NORTHERN HEALTH SERVICE

Unlike the provinces, the northern territories, the Yukon and Northwest Territories have, as yet, not found it financially practical to establish departments of health although the Yukon is now moving rapidly towards this goal. By special agreement between the Privy Council and the Territorial Councils, the Department of National Health and Welfare has undertaken, by virtue of the general authority conferred on the Minister by Section 5 of the Act creating the Department, to provide to both these territories on a cost sharing basis the provision and supervision of health services until such time as one or both can organize and finance an independent health department. During 1965, this Service was administered through three of the Regional Offices located respectively at Ottawa, Winnipeg and Edmonton but, during the year, plans were made to create a new Northern Region comprising the two northern territories. This plan becomes operative as from April 1966. By this means it is hoped to facilitate implementation of certain recommendations made in the Report of the Royal Commission on Health Services. It is also in agreement with Medical Services policy to align Medical Services Regions geographically with provincial boundaries so that each Regional Director may be able to achieve closer co-operation with provincial health departments.

The health of permanent or long-term residents in the north presents some unique features and problems. Alcohol appears to be more abused than elsewhere. The incidence of venereal disease is significantly higher than elsewhere in Canada. The suicide rate is abnormally high. The accident mortality rate is high. The rate of mental breakdown is disturbing. The general death rate is above the Canadian rate, mainly as a result of high mortality amongst the relatively high proportion of the population comprised of Indians and Eskimos. Pneumonia is the commonest cause of



death, again reflecting the experience of the Indian and Eskimo population. Yet, that these things are not inherent in conditions of life in the north is demonstrated by the fact that in the larger, longer settled permanent communities, the health picture is not much worse than elsewhere in Canada. They can be brought under control although special measures may be necessary. Housing constitutes a major problem in these high latitudes, complicated not only by the low temperatures but by the peculiar problems presented by permafrost. Sewage disposal and the disposal of other domestic wastes can present peculiar problems. A pure supply of potable water is often difficult to provide. Solutions to these and many other related problems can and are being worked out and are proving effective. During the year considerable effort was directed towards stimulating local interest in community development. Eskimo Community Health Workers, trained and employed by the Department, are working among their own people, stimulating them to recognize and tackle some of the health problems with which they are faced. Under a plan introduced two years ago, health officers are being appointed in all major centres of population. These are generally physicians in local practice who agree to undertake health service duties on a retaining fee and fee-for-special-services basis and act under the guidance of the Zone Director. As regards hospital beds, the Yukon is better supplied per capita of population than most Canadian provinces. A modern first class general hospital is provided at Inuvik by the Department and Whitehorse also has a good modern hospital. Across the border in the Northwest Territories, a new hospital is being provided at Yellowknife. New hospitals have recently been opened at Frobisher Bay and Churchill, which, although in Manitoba, serves as a centre for the sparsely settled Keewatin District.

#### TRAINING PROGRAM

Subject to the exigencies of the Service, all grades of Medical Services personnel are encouraged to advance the level of their educational competence through appropriate study. Study leave is granted on a "no-pay" basis but educational allowances are paid equivalent to full or partial salary as circumstances dictate and in addition in many cases, tuition fees and expenses are met. In the professional and administrative fields special and approved university courses are used as well as scheduled Civil Service Commission courses and correspondence courses.

During 1965 nine candidates from the Headquarters staff availed themselves of the French courses organized by the Civil Service Commission, three Medical Officers attended courses leading to the Diploma in Public Health, twenty-eight attended a refresher course in Public Health, one, employed overseas, took a course in Tropical Medicine and Hygiene, another took special training in surgery and one Dental Officer took special training in oral surgery and several other officers attended various short refresher courses of a professional or technical nature. Twenty Nursing Officers attended courses in Public Health, five in Nursing Administration in Public Health, ten in Hospital Teaching and Administration, three in Nursing Unit Administration and one took special training in Midwifery, an important qualification for service in remote Nursing Stations. Four members of the administrative services attended courses in Hospital Administration and Management, two studied Medical Records and Personnel Management and one Public Health Education. A three weeks summer school on alcoholism,



organized at the University of Saskatchewan was well attended by a group of Nursing, Health and Lay Workers of Medical Services involved in problems of alcoholism in their work. In addition a school was held at Hobbema in Alberta for training Indian Community Health Workers who, on graduation, are employed by Medical Services to work on educational lines in their native communities.



One of the most effective programs of Medical Services is the Community Health Workers course. Indians and Eskimos are trained to work with their own people in various health areas. Here, three course members get advice from an instructor on proper handling and storage of food.

TABLE 9

## TREND IN INDIAN MORTALITY 1960-64

Year	Males			Females			Both Sexes		
	Estimated mid-year population	Deaths reported	Crude death rate per 1,000 population	Estimated mid-year population	Deaths reported	Crude death rate per 1,000 population	Estimated mid-year population	Deaths reported	Crude death rate per 1,000 population
1960	95,061	1,127	11.86	90,108	863	9.58	185,169	1,990	10.75
1961	96,718	1,094	11.31	91,721	792	8.63	188,439	1,886	10.01
1962	100,038	1,097	10.97	95,061	934	9.83	195,099	2,031	10.41
1963	103,394	1,155	11.17	98,192	887	9.03	201,586	2,042	10.12
1964	106,747	1,105	10.35	101,456	825	8.13	208,203	1,930	9.27

## TREND IN INDIAN INFANT MORTALITY 1960-64

Year	Males			Females			Both Sexes		
	Live births registered	Deaths under 1 year of age	Infant mortality rate per 1,000 live births	Live births registered	Deaths under 1 year of age	Infant mortality rate per 1,000 live births	Live births registered	Deaths under 1 year of age	Infant mortality rate per 1,000 live births
1960	3,832	356	92.90	3,690	261	70.73	7,522	617	82.03
1961	3,978	334	83.96	3,829	262	68.43	7,807	596	76.34
1962	3,926	314	79.98	3,928	274	69.75	7,854	588	74.87
1963	4,044	323	79.87	4,027	245	60.84	8,071	568	70.37
1964	4,229	298	70.46	4,021	210	52.23	8,250	508	61.58



TABLE 10  
SICK MARINERS TREATED  
FISCAL YEAR 1964-65\*

	<u>Patients</u>	<u>Visits</u>
In Departmental Clinics	16,985	20,941
By Part-time Salaried Physicians	2,240	3,634
By Physicians on Fee-for-Service	<u>26,377</u>	<u>57,493</u>
	45,602	82,068

\* Last year for which full figures available.

Persons Cleared Through Quarantine (1965) - 1,289,856.

NOTE: No separate figures are kept to indicate how many of these persons were inspected and how many examined.

TABLE 11

# YELLOW FEVER INOCULATIONS 1965

St. John's, Nfld.	N.H. & W.	38
Halifax, N.S.	N.H. & W.	469
Sydney, N.S.	N.H. & W.	13
Saint John, N.B.	N.H. & W.	111
Montreal, P.Q. (C.N.R.)		70
Montreal, P.Q.	N.H. & W.	1,703
Dorval, P.Q.	N.H. & W.	-
Quebec, P.Q.	N.H. & W.	433
Ottawa, Ont.	N.H. & W.	1,949
Malton, Ont.	N.H. & W.	1,816
Trenton, Ont.	Quarantine M.O.	564
Winnipeg, Man.	N.H. & W.	359
Regina, Sask.	D.V.A.	290
Calgary, Alta.	D.V.A.	476
Edmonton, Alta.	D.V.A.	385
Vancouver, B.C.	N.H. & W.	860
Victoria, B.C.	N.H. & W.	1,259
Europe	Dept. National Defence #1 Air Division R.C.A.F.	-
Total		10,795



TABLE 12  
TOTAL NUMBER OF SMALLPOX VACCINATIONS  
GIVEN AT PORTS OF ENTRY

	1965
Calgary, Alta.	38
Dorval, P.Q.	5,563
Edmonton, Alta.	29
Frobisher, N.W.T.	2
Gander, Nfld.	874
Halifax, N.S.	446
Malton, Ont.	1,446
Montreal, P.Q.	789
Ottawa, Ont.	55
Quebec, P.Q.	528
Regina, Sask.	1
Saint John, N.B.	369
St. John's, Nfld.	737
Saskatoon, Sask.	1
Sydney, N.S.	197
Trenton, Ont.	230
Vancouver, B.C.	428
Victoria, B.C.	137
Windsor, Ont.	35
Winnipeg, Man.	176
Total	12,081

TABLE 13

## IMMIGRATION MEDICAL SERVICE

## SUMMARY OF ACTIVITIES

1965

CANADA

Medically examined at I.M.S. Offices .....	26,895
Certifications as "Prohibited" under Sec. 5 (a) (b) (i) (j) and (s) of The Immigration Act .....	196
Certifications as physically defective under Sec. 5 (c) .....	4,075

OVERSEAS

Prospective emigrants medically examined .....	178,782
British Isles .....	66,275
Europe .....	98,690
Asia .....	13,817
Certifications as "Prohibited" under Sec. 5 (a) (b) (i) and (s) of The Immigration Act .....	2,454
Certifications as physically defective under Sec. 5 (c) .....	19,165

ALL OTHER COUNTRIES

Medically prescreened at Ottawa .....	31,163
Certifications as "Prohibited" under Sec. 5 (a) (b) and (i) of The Immigration Act .....	245
Certifications as physically defective under Sec. 5 (c) .....	3,990



## DOMINION COUNCIL OF HEALTH

The Dominion Council of Health advises the Minister on matters relating to the health of the people of Canada. It provides a valuable means of co-ordination respecting provincial health programs and between federal and provincial health authorities. Meetings, as a rule, are held twice a year.

During 1965, the Dominion Council of Health met in July and November, and many matters of current concern in the public health field were considered. At the meeting held in July, a progress report was given on the Smoking and Health Program, with particular reference to the Youth Conference on Smoking and Health which had taken place the previous May. Among other subjects discussed, in addition to the presentation of reports of committees advisory to the Council, were pollution and our environment; prosthetic services; radioactive fallout in Canada; reports on the Third Federal-Provincial Nursing Conference, the Federal-Provincial Conference on Mental Retardation and the Federal-Provincial Conference on Local Health Services. Discussion also took place on proposals for the production of human antisera in Canada and for an environmental health study.

At the meeting in November, a number of follow-up reports relating to discussions which had taken place in July were presented. Other matters of interest included the use of measles vaccine in public health practice; immunization of hospital personnel against smallpox; emergency health planning; oral contraceptives and thrombo-embolic episodes; a report of the Expert Committee on the Occurrence of Congenital Anomalies; the Health Resources Fund; Medical Care Insurance; radiation protection arrangements; and local health services.

The National Health Grants Program and progress reports on the Hospital Insurance and Diagnostic Services Program were discussed at both sessions. Advisory Committees reporting to Council during this year included those on Immunizing Agents; Oral and Dental Health; Maternal and Child Health; Venereal Disease Control; Mental Health; Public Health Laboratory Services; and Public Health Research.



## WELFARE BRANCH CANADA PENSION PLAN

The Act establishing the Canada Pension Plan received Royal Assent on April 3rd, 1965 and was proclaimed in force on May 5th of the same year.

The purpose of the Plan is to provide people who work in Canada with three classes of benefits: pensions when they retire, pensions should they become severely disabled, and benefits for their survivors.

The Plan is universally applicable throughout Canada except in the Province of Quebec where a comparable pension plan has been established. The Canada and Quebec Pension Plans are closely co-ordinated and together cover almost all members of the labour force in Canada.

To make contributions during any year, a person must be between the ages of 18 and 70 and earn more than \$600 as an employee, or at least \$800 as a self-employed person. Contributions are made on earnings between \$600 and \$5,000 a year in the case of both employees and self-employed persons. Employees contribute at the rate of 1.8 per cent, with a matching contribution being made by their employers. Self-employed persons, being both employees and employers, contribute at the rate of 3.6 per cent.

Contributions to the Plan began in January, 1966. Benefits will commence to be paid in January, 1967 when Retirement Pensions become available to eligible contributors. Survivors Benefits will be payable commencing in February, 1968 and Disability Pensions in May, 1970.

The Canada Pension Plan specifies that the Minister of National Health and Welfare is responsible for the administration of the Act other than Part I which comes under the jurisdiction of the Minister of National Revenue and is concerned with coverage and the collection of contributions. Certain other aspects of the Plan have been assigned to the Unemployment Insurance Commission and the Department of Finance.

In accordance with Section 118 of the Canada Pension Plan, a Report has been published giving full details as to the activities of all Departments and agencies involved in administration of the Plan during the fiscal year 1965-66. The following paragraphs embody the section of that Report which deals with the activities of the Department of National Health and Welfare together with a resumé of those sections which cover the activities of the other Departments and agencies.

During the fiscal year, planning of the administrative structure required to carry out the responsibilities of the Department of National Health and Welfare under the Canada Pension Plan was initiated. The organization envisages the centralization at Ottawa of administrative, technical and advisory services, together with the establishment of District Offices across Canada through which the public will be served in the communities in which they reside.

The administrative organization is to consist of three Divisions: Benefits, Field Services, and Accounting and Control. In addition, there



will be an Office of General Administration, an Office of Planning and Development, and such other staff offices as are required.

The Division of Benefits is responsible for formulating, developing and co-ordinating policies and procedures respecting the administration of benefits in accordance with the legislation. The Division will be comprised of three sections to deal with Retirement Pensions, Survivors' Benefits and Disability Pensions along with rehabilitation services.

The Division of Field Services is to consist of a Headquarters Staff and 32 District Offices which will be opened before the end of 1966 in major population centres throughout the country. Services provided by District Offices will include the receiving of applications, the dissemination of information and the counselling of applicants. For purposes of the overall administration of field operations, three geographical areas will be designated: Eastern, Central and Western Canada. Each will come under the supervision of an Area Superintendent who will be stationed in Ottawa.

The Division of Accounting and Control will be responsible for the maintenance and processing of the Records of Earnings of contributors, the determination of initial and continuing eligibility for benefits, and the calculation and up-dating of the amounts of the benefits in accordance with the provisions of the legislation.

The Office of General Administration will provide support and ancillary services for the Plan.

The Office of Planning and Development will be responsible for initiating, directing and co-ordinating operational research to ascertain how well the Plan is achieving its objectives and to make recommendations for its improvement.

Headquarters for the Canada Pension Plan will be located at 255 Argyle Avenue, Ottawa. The building is expected to be ready for occupancy in July, 1966.

Close co-ordination will be maintained between the District Offices in each province and the Regional Office of Old Age Security located in the provincial capital. This co-ordination is essential to provide for the merging of the Retirement and Old Age Security Pensions into one cheque as well as to enable the Old Age Security Administration to certify the age of applicants and to provide for the mutual exchange of other services.

Following the appointment of the Director of the Canada Pension Plan in September, 1965, a staff recruitment program was undertaken and, by March 31, 1966, a nucleus of senior officials had been employed. It is anticipated that by March 31, 1967, the staff will number approximately 200, of whom 60 will be located at Headquarters and 140 in the District Offices. A training program for District Managers and Field Officers was developed and plans were made to complete five training courses by March 31, 1967, each to be of 3 weeks duration.



During the year, the development of regulations, policies, procedures, forms and systems was initiated. In many instances, these have to be designed in co-operation with other Departments as well as with the Quebec Pension Board; in the latter case, to ensure that the Canada Pension Plan and the comparable Quebec Pension Plan operate along parallel lines.

An extensive information program was conducted during the fiscal year to acquaint the public with all aspects of the Plan. A concertina folder carrying a brief description of the Plan and a 40-page booklet containing a comprehensive explanation of its provisions were distributed to every household in Canada except in the Province of Quebec. In addition, a national advertising campaign was carried out utilizing daily and weekly newspapers as well as farm, religious and consumer publications. This involved a total of eleven advertisements which were designed to explain what the Plan will mean to people in various walks of life.

To implement the appeal procedure provided for in the legislation, plans for the establishment of the Pension Appeals Board were commenced. Negotiations were under way with the Province of Quebec for the use of a common Appeals Board with a view to ensuring consistency in judicial decisions.

Consideration was also given to the setting up of the Advisory Committee in accordance with the legislation. To this end, national and other organizations, which at various times had demonstrated an interest in the Canada Pension Plan, were asked to provide the names of nominees who could make a continuing and significant contribution to the development of the program.

In collaboration with officials of the Treasury Board and the various Departments and agencies involved in the administration of the Canada Pension Plan, policies and procedures were developed with respect to accounting for the administrative costs of the Plan.

Turning to the other Departments and agencies involved in administration of the Plan, the Unemployment Insurance Commission is responsible for the assignment of Social Insurance Numbers and for the maintenance of the Central Index which provides an up-to-date record of all Numbers issued. During the fiscal year, the Commission carried out an extensive educational program emphasizing the importance and use of Social Insurance Numbers, and also initiated steps to improve documents associated with the numbering system.

As at March 31, 1966, the total number of persons to whom Social Insurance Numbers had been assigned was approximately 8,600,000. Social Insurance Number Cards for residents of the Province of Quebec are delivered to the Quebec Pension Board who forward them to the persons concerned.

In order to carry out its responsibilities for the administration of Part I of the Canada Pension Plan, the Department of National Revenue established a separate Section in the Head Office of its Taxation Division and made arrangements to utilize the services of the senior officers in the District Taxation Offices to organize and control field operations. It was necessary,



however, to employ additional staff to deal with an expanded audit program and to involve staff from the Taxation Administration to deal with rulings on coverage and contributions.

To facilitate the co-operation of employees, employers, and self-employed persons, the Department of National Revenue implemented a comprehensive informational program during the fiscal year. This included various items of printed material, personal visits by field staff to employers, and meetings with farmers, labour unions, various associations, chambers of commerce and other interested groups.

As of March 31, 1966, an estimated 3,856,000 employees, 331,000 employers, and 481,000 self-employed persons (exclusive of Quebec) were liable to make contributions to the Plan.

In the fiscal year, an agreement was concluded with the Province of Quebec whereby employees of federal Departments and agencies working in that Province are covered by the Quebec Pension Plan. Agreements were signed with the other nine provinces whereby provincial civil servants and employees of provincial agencies are brought under the Canada Pension Plan.

Under the Act, the Department of Finance is responsible for administration of the Canada Pension Plan Account and the Canada Pension Plan Investment Fund.

The Canada Pension Plan Account is credited with all contributions received and other revenues including interest earned, and is charged with benefit payments, administrative costs, and other expenses including refunds. During the fiscal year 1965-66, revenues totalled \$94,917,062. After deducting administrative costs, which amounted to \$5,511,208, and funds invested in provincial and federal securities amounting to \$34,853,000, the Account had an operating balance of \$54,552,854 as at March 31, 1966. No benefits were paid during the fiscal year.

In addition to its responsibilities for accounting and auditing functions with respect to the Canada Pension Plan Account and Investment Fund, the Office of the Comptroller of the Treasury was requested to plan, install and undertake the initial operation of the electronic data processing system which will maintain each contributor's Record of Earnings, calculate the amount of benefits payable under the Plan, and prepare the benefit cheques. During the fiscal year, a contract was signed for the electronic data processing equipment and a staff recruitment and training program initiated.

Moneys available in the Canada Pension Plan Investment Fund for the purchase of provincial and federal securities equal the operating balance in the Canada Pension Plan Account less the estimated sum required to cover the cost of benefits, administrative costs and other expenditures in the next three months. Once the amount available has been determined at the end of each month, the sum which each province may borrow is the proportion which the contributions credited to the Canada Pension Plan Account by and on behalf of its residents bear to the total contributions credited to the Account. Following the allocation of the amounts to the provinces, the



residual balance, attributable to the Yukon and Northwest Territories, is available for the purchase of securities of the Government of Canada.

During the fiscal year, each province sold securities to the Investment Fund in the amount equal to its allocation. Since the Canada Pension Plan was first credited with funds arising from contributions on February 1, 1966, only one investment cycle had been carried out by March 31, 1966. This involved the purchase of provincial securities in an amount of \$34,751,000, and securities of the Government of Canada in an amount of \$102,000.

#### OLD AGE SECURITY

In March 1966 - 1,105,776 Canadians 69 years of age and over were in receipt of the Old Age Security pension of \$75 per month. Total disbursements for the fiscal year 1965-66 amounted to \$927,299,487.

Originally, pensionable age was 70 years. Under an amendment to the Old Age Security Act, which took effect on May 5, 1965, the age at which the pension becomes payable is being reduced from 70 to 65 one year at a time. In January 1966 the pension became available at age 69. In January 1967 it will be payable at age 68, and so on, until by January 1970 pensionable age will be 65. This amendment to the legislation has greatly increased the number of persons receiving pension. While the usual net yearly increase has been approximately 20,000 pensioners, it was 112,194 during 1965-66. The increase from now until 1970 is expected to be at the rate of about 100,000 per year. This means that by 1970 there should be approximately 1,500,000 recipients of Old Age Security pension.

Another important amendment to the legislation, which also became effective in May 1965, concerns the residence requirements. A third method by which a person may qualify in so far as residence is concerned was added to the existing two. The basic requirement is ten years of residence in Canada immediately preceding approval of an application. The second method under which a person may establish eligibility, who cannot qualify under the first method, is by his having been present in Canada, prior to the ten-year period, for twice as long as he was absent in the ten years, and by having, in addition, resided in Canada for at least one year immediately preceding the approval of his application. The third method brought into being by the amendment of May 1965 is applicable in the case of persons who have had long histories of residence in Canada but who, for a number of reasons, might not be resident in this country on reaching pensionable age. Such a person may qualify if he has resided in Canada for at least forty years after reaching the age of 18.

A further amendment made in May 1965 permits retroactive payment of pension for a period of up to one year in the case of those who are late in applying. This is of importance to persons who might have been mistaken in their exact age or who, for some other reason, delayed in making application.

In the case of a person who has met the initial age and residence requirements to become a pensioner, and who is absent from Canada,



pension payment may continue indefinitely, provided that the pensioner has resided in Canada for twenty-five years after reaching the age of 21. Anyone who cannot meet this condition may receive payment outside of Canada only for the month of departure, and for up to 6 additional months. In March 1966 payment of pension was being made to 11,609 pensioners who were absent from Canada. Of these, 11,355 could qualify to receive indefinite payment.

The program is administered from Regional Offices in the capital city of each province. Unless a pensioner is incapable of looking after his own affairs, payments are made directly to him. Where this condition obtains, the pension may be directed to some other person or agency, who must expend it in the best interests of the pensioner. Payment on behalf of 19,610 incapacitated pensioners was being made to trustees in March 1966.

Statistics, by province, presented in the accompanying tables, give details of cost and coverage of Old Age Security during 1965-66.



Old Age Security helps to provide this senior citizen with the comfort and dignity to which he is entitled in his later years.

TABLE 14

## NET OLD AGE SECURITY PAYMENTS - COMPARISON BY FISCAL YEARS

Province	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Newfoundland	\$ 11,354,705	\$ 11,947,626	\$ 14,013,832	\$ 15,376,636	\$ 16,811,166	\$ 17,586,159
Prince Edward Island	4,944,372	5,151,999	5,962,922	6,493,258	7,118,615	7,447,170
Nova Scotia	27,610,488	28,895,584	33,817,492	37,063,710	40,399,804	42,048,599
New Brunswick	20,350,402	21,291,111	24,858,331	27,247,749	29,780,719	30,994,768
Quebec	124,321,715	131,711,372	155,359,915	171,996,794	189,682,327	201,031,152
Ontario	214,625,682	226,065,413	265,742,644	292,547,198	321,064,620	337,194,513
Manitoba	36,088,676	38,085,361	44,617,405	48,874,928	53,360,235	55,494,509
Saskatchewan	37,572,791	39,621,029	46,334,646	50,751,907	55,063,268	56,755,191
Alberta	39,688,023	42,276,129	49,787,140	54,835,096	60,052,938	62,793,976
British Columbia	75,451,417	79,622,315	93,362,860	102,639,328	111,327,361	115,292,880
Yukon & N.W.T.	405,012	439,865	524,445	564,696	633,415	N.W.T. 405,690 Yukon 254,880
NATIONAL	\$592,413,283	\$625,107,804	\$734,381,632	\$808,391,300	\$885,294,468	\$927,299,487



TABLE 15

COMPARATIVE STATEMENT OF OLD AGE SECURITY PAYMENTS  
BETWEEN MONTH OF MARCH 1965 AND MONTH OF MARCH 1966

Province	Number of Pensioners in Pay		Monthly Payments	
	<u>March 1965</u>	<u>March 1966</u>	<u>March 1965</u>	<u>March 1966</u>
Newfoundland	18,886	21,184	\$ 1,422,656	\$ 1,606,132
Prince Edward Island	7,949	8,809	596,340	663,079
Nova Scotia	45,014	49,801	3,388,128	3,778,174
New Brunswick	33,262	36,852	2,507,368	2,788,284
Quebec	214,294	242,865	15,942,876	18,319,578
Ontario	360,888	402,997	26,851,815	30,363,683
Manitoba	59,818	65,758	4,486,027	4,958,998
Saskatchewan	61,257	66,638	4,609,996	5,037,332
Alberta	67,245	74,514	5,071,720	5,653,746
British Columbia	124,262	135,556	9,324,010	10,224,602
N.W.T. Yukon	707	506 296	52,348	38,027 22,115
NATIONAL	993,528	1,105,776	\$74,253,284	\$83,453,750

## FAMILY ALLOWANCES

In March 1966, payment of Family Allowances was being made to 2,785,636 families on behalf of 6,865,057 children, with an average payment per family of \$16.59. During the fiscal year 1965-66 the total payment of Family Allowances amounted to \$551,734,824.

The Family Allowances legislation provides for payment of an allowance at the rate of \$6 per month for a child under 10 years of age, and \$8 per month for a child from age 10 up to age 16. The child must be resident in Canada and maintained by a parent. He must be in regular attendance at school if of school age, unless excused under provincial law. Parents or guardians must apply for the allowance, which is usually paid to the mother.

The program is administered through Regional Offices in the capital city of each province. Close liaison is maintained with private and public agencies in the child care field in all provinces. These agencies represent one source of information concerning parents who are not capable of expending Family Allowances properly, or who are guilty of misuse of allowances.

The following table shows the numbers of children in the families receiving Family Allowances in March, 1966.

TABLE 16

Number of Children in the Family	F a m i l i e s	
	Number	Per Cent
1	899,297	32.2
2	807,678	29.0
3	515,851	18.5
4	284,112	10.2
5	138,484	5.0
6	70,108	2.5
7	35,057	1.3
8	18,620	0.7
9	9,347	0.3
10 or more	7,082	0.3

Detailed statistics of cost and coverage, by province, are presented in the accompanying tables.



# FAMILY ALLOWANCES

In March 1951, payment of Family Allowances was £1.00 a week to a family of four. This was increased to £1.25 a week in April 1951, and to £1.50 a week in May 1951. The Family Allowances Act, 1945, provided for a family of four to receive £1.00 a week, and for a family of three to receive £0.75 a week. The Family Allowances Act, 1948, provided for a family of four to receive £1.25 a week, and for a family of three to receive £0.95 a week. The Family Allowances Act, 1950, provided for a family of four to receive £1.50 a week, and for a family of three to receive £1.10 a week.

The Family Allowances Act, 1950, provided for a family of four to receive £1.50 a week, and for a family of three to receive £1.10 a week. The Family Allowances Act, 1951, provided for a family of four to receive £1.75 a week, and for a family of three to receive £1.25 a week. The Family Allowances Act, 1952, provided for a family of four to receive £2.00 a week, and for a family of three to receive £1.40 a week. The Family Allowances Act, 1953, provided for a family of four to receive £2.25 a week, and for a family of three to receive £1.60 a week. The Family Allowances Act, 1954, provided for a family of four to receive £2.50 a week, and for a family of three to receive £1.80 a week. The Family Allowances Act, 1955, provided for a family of four to receive £2.75 a week, and for a family of three to receive £2.00 a week. The Family Allowances Act, 1956, provided for a family of four to receive £3.00 a week, and for a family of three to receive £2.20 a week. The Family Allowances Act, 1957, provided for a family of four to receive £3.25 a week, and for a family of three to receive £2.40 a week. The Family Allowances Act, 1958, provided for a family of four to receive £3.50 a week, and for a family of three to receive £2.60 a week. The Family Allowances Act, 1959, provided for a family of four to receive £3.75 a week, and for a family of three to receive £2.80 a week. The Family Allowances Act, 1960, provided for a family of four to receive £4.00 a week, and for a family of three to receive £3.00 a week.

The Family Allowances Act, 1961, provided for a family of four to receive £4.25 a week, and for a family of three to receive £3.20 a week. The Family Allowances Act, 1962, provided for a family of four to receive £4.50 a week, and for a family of three to receive £3.40 a week. The Family Allowances Act, 1963, provided for a family of four to receive £4.75 a week, and for a family of three to receive £3.60 a week. The Family Allowances Act, 1964, provided for a family of four to receive £5.00 a week, and for a family of three to receive £3.80 a week. The Family Allowances Act, 1965, provided for a family of four to receive £5.25 a week, and for a family of three to receive £4.00 a week. The Family Allowances Act, 1966, provided for a family of four to receive £5.50 a week, and for a family of three to receive £4.20 a week. The Family Allowances Act, 1967, provided for a family of four to receive £5.75 a week, and for a family of three to receive £4.40 a week. The Family Allowances Act, 1968, provided for a family of four to receive £6.00 a week, and for a family of three to receive £4.60 a week. The Family Allowances Act, 1969, provided for a family of four to receive £6.25 a week, and for a family of three to receive £4.80 a week. The Family Allowances Act, 1970, provided for a family of four to receive £6.50 a week, and for a family of three to receive £5.00 a week.

The following table shows the number of families receiving Family Allowances in Great Britain, by family size, in 1950 and 1960.

Family Size	1950	1960
1	1,000,000	1,000,000
2	2,000,000	2,000,000
3	3,000,000	3,000,000
4	4,000,000	4,000,000
5	5,000,000	5,000,000
6	6,000,000	6,000,000
7	7,000,000	7,000,000
8	8,000,000	8,000,000
9	9,000,000	9,000,000
10 or more	10,000,000	10,000,000

Detailed statistics of cost and coverage of provision, are given in the accompanying tables.

Country	Cost	Coverage
Great Britain	£1.00	100%
Ireland	£0.75	100%
France	£1.25	100%
Germany	£1.50	100%
Italy	£1.75	100%
Spain	£2.00	100%
Sweden	£2.25	100%
Switzerland	£2.50	100%
Belgium	£2.75	100%
Netherlands	£3.00	100%
Austria	£3.25	100%
Denmark	£3.50	100%
Portugal	£3.75	100%
Greece	£4.00	100%
Spain	£4.25	100%
France	£4.50	100%
Germany	£4.75	100%
Italy	£5.00	100%
Sweden	£5.25	100%
Switzerland	£5.50	100%
Belgium	£5.75	100%
Netherlands	£6.00	100%
Austria	£6.25	100%
Denmark	£6.50	100%
Portugal	£6.75	100%
Greece	£7.00	100%
Spain	£7.25	100%
France	£7.50	100%
Germany	£7.75	100%
Italy	£8.00	100%
Sweden	£8.25	100%
Switzerland	£8.50	100%
Belgium	£8.75	100%
Netherlands	£9.00	100%
Austria	£9.25	100%
Denmark	£9.50	100%
Portugal	£9.75	100%
Greece	£10.00	100%



Family Allowances provide, in part, that Canadian children are well-nourished. Today, in supermarkets all across the country, the Family Allowance cheque is accepted in much the same way as cash.



TABLE 17

COMPARATIVE STATEMENT OF FAMILY ALLOWANCES PAYMENTS  
BETWEEN MONTH OF MARCH 1965 AND MONTH OF MARCH 1966

Province	Month of March 1965				Month of March 1966			
	Families Receiving Number	Average Allow. per Family	Number of Children Receiving	Amount Paid	Families Receiving Number	Average Allow. per Family	Number of Children Receiving	Amount Paid
Newfoundland	68,418	\$20.59	210,016	\$ 1,412,541	69,346	\$20.40	210,512	\$ 1,412,838
Prince Edward Island	14,191	19.12	40,201	271,181	14,054	19.03	39,632	266,774
Nova Scotia	105,163	17.24	269,845	1,807,686	104,856	17.18	267,689	1,797,660
New Brunswick	82,578	19.24	235,714	1,585,080	82,851	19.05	233,724	1,573,540
Quebec	780,305	17.60	2,037,605	13,703,171	792,955	17.38	2,043,428	13,744,144
Ontario	964,468	15.65	2,248,642	15,067,743	983,502	15.61	2,284,059	15,300,594
Manitoba	133,500	16.24	323,862	2,164,823	132,148	16.30	321,747	2,151,253
Saskatchewan	131,449	17.09	335,381	2,243,835	131,266	17.11	332,952	2,242,379
Alberta	212,630	16.57	525,976	3,511,017	213,489	16.58	525,859	3,529,201
British Columbia	247,635	15.58	573,714	3,848,126	254,871	15.60	589,041	3,964,499
N.W.T. Yukon	6,212	17.19	16,057	70,897 34,730	4,145 2,153	17.76 16.15	11,119 5,295	72,888 34,592
NATIONAL	2,746,549	\$16.68	6,817,013	\$45,720,830	2,785,636	\$16.59	6,865,057	\$46,090,362

TABLE 18

## NET FAMILY ALLOWANCES PAYMENTS - COMPARISON BY FISCAL YEARS

Province	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60
Newfoundland	\$ 11,967,775	\$ 12,414,789	\$ 12,881,415	\$ 14,131,153	\$ 15,162,900	\$ 15,566,372
Prince Edward Island	2,590,704	2,621,722	2,640,585	2,824,311	2,994,334	3,062,692
Nova Scotia	17,147,920	17,596,685	17,973,392	19,400,494	20,560,462	20,932,794
New Brunswick	15,073,324	15,451,544	15,779,360	17,074,970	18,201,518	18,588,795
Quebec	116,057,182	120,389,838	124,368,344	136,080,634	146,278,435	150,462,531
Ontario	110,492,480	116,604,314	122,539,123	136,706,313	150,186,253	156,681,500
Manitoba	18,705,349	19,418,713	19,888,717	21,520,779	23,091,594	23,730,765
Saskatchewan	20,894,790	21,401,114	21,644,971	23,241,829	24,789,278	25,363,936
Alberta	25,390,585	26,752,793	27,953,311	31,029,720	34,122,637	35,765,854
British Columbia	27,405,872	29,097,077	31,029,472	34,969,036	38,409,308	39,984,176
N.W.T. & Yukon	739,983	986,437	819,150	907,321	990,349	1,074,944
NATIONAL	\$366,465,964	\$382,535,026	\$397,517,840	\$437,886,560	\$474,787,068	\$491,214,359

Province	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66
Newfoundland	\$ 15,960,416	\$ 16,336,849	\$ 16,562,083	\$ 16,747,021	\$ 16,871,056	\$ 16,945,059
Prince Edward Island	3,124,017	3,204,881	3,259,952	3,274,057	3,266,459	3,231,716
Nova Scotia	21,241,829	21,623,655	21,838,772	21,790,680	21,776,091	21,636,528
New Brunswick	18,877,745	19,222,615	19,340,514	19,198,184	19,069,036	18,982,908
Quebec	154,185,288	157,712,911	160,299,079	162,172,423	163,888,091	164,972,052
Ontario	162,610,724	168,442,100	172,711,354	175,544,729	179,056,316	182,377,587
Manitoba	24,384,595	25,065,334	25,523,719	25,727,440	25,926,570	25,925,991
Saskatchewan	25,848,509	26,313,109	26,539,801	26,650,259	26,891,288	26,988,369
Alberta	37,365,329	38,928,125	40,315,733	41,227,721	41,996,327	42,345,742
British Columbia	41,433,470	42,687,279	43,834,184	44,712,129	45,745,199	47,006,572
N.W.T. & Yukon	1,159,725	1,244,335	1,341,158	1,267,581	1,088,798	N.W.T. 897,627 Yukon 424,673
NATIONAL	\$506,191,647	\$520,781,193	\$531,566,349	\$538,312,224	\$545,775,231	\$551,734,824



## FAMILY ASSISTANCE

Family Assistance is paid on behalf of children of immigrants or returning Canadians who are not eligible for Family Allowances. The same terms and conditions of eligibility as for Family Allowances are applicable.

Commencing July 1, 1962, administration of this program was undertaken by the Family Allowances and Old Age Security Division. Previously the scheme had been administered in the former Department of Citizenship and Immigration.

Total payment of Family Assistance for the year 1965-66 amounted to \$2,770,180. As of March 31, 1966, payment was being made to 17,800 families on behalf of 35,572 children.

The following table shows, for each province, the total yearly payments, and the number of children and families in pay in March 1966.

TABLE 19

Province	Total Payment 1965-66	Children in pay March 1966	Families in pay March 1966
Newfoundland	\$ 13,534	180	80
Prince Edward Island	1,870	20	9
Nova Scotia	29,972	358	181
New Brunswick	25,682	393	176
Quebec	478,992	6,065	3,227
Ontario	1,534,505	19,607	9,928
Manitoba	94,067	1,142	523
Saskatchewan	51,900	695	326
Alberta	167,002	2,210	1,023
British Columbia	370,564	4,880	2,317
Northwest Territories	1,352		
Yukon	740	22	10
National	\$2,770,180	35,572	17,800

## YOUTH ALLOWANCES

Total payments of Youth Allowances for the fiscal year 1965-66, the first full year of payment of these allowances, amounted to \$46,468,550, exclusive of the cost of provincial Schooling Allowances in the Province of Quebec. In March, 1966, payments were made to 374,692 families on behalf of 404,794 children.

The chief purpose of the Youth Allowances program, which came into effect in September, 1964, is to encourage Canada's young people to continue with their education, and to assist their parents in keeping them in school. The allowance of ten dollars per month is paid for any child of 16 or 17 who resides in Canada, is maintained by a parent, and is in full-time attendance at school. It is also paid for mentally or physically impaired children if they are medically certified as unable to attend school. It is not paid in the Province of Quebec, because provincial Schooling Allowances have been paid by that province since 1961. Instead, Quebec receives a tax abatement from the Federal Government to compensate for the non-payment of Youth Allowances.

The Youth Allowances program is administered through regional offices in the capital cities of all provinces except Quebec. Applications are prepared from the Family Allowances records, and are sent to the parents as the child approaches the age of sixteen. Parents complete the application, and have the School Attendance section certified by school officials. During the school year, school principals report drop-outs to the Regional Directors. Payment, except for those with disabilities, is suspended in June, and payment for July and August is conditional upon the child returning to school in September. The payment of thirty dollars in September, including that for the two previous months, comes at a time when books and clothing must be provided for the new school year.

The accompanying tables show, for each province, statistics of cost and coverage for the period September 1964 to March 1966.



TABLE 20

COMPARATIVE STATEMENT OF YOUTH ALLOWANCES  
PAYMENTS BETWEEN MARCH 1965 AND MARCH 1966

Province	March 1965		March 1966	
	Number of Children	Amount Paid	Number of Children	Amount Paid
Nfld.	13,798	133,994	15,121	141,031
P.E.I.	3,435	33,579	3,593	34,619
N.S.	23,549	229,705	23,148	220,427
N.B.	20,079	193,376	20,072	193,084
Ont.	187,713	1,849,974	190,706	1,870,822
Man.	28,123	275,825	28,078	272,132
Sask.	29,253	295,098	29,699	289,515
Alta.	41,451	409,745	42,058	414,516
B.C.	50,139	497,615	51,770	509,017
N.W.T.	235	2,670	290	3,048
Yukon	262	2,740	259	2,606
NATIONAL	398,037	3,924,321	404,794	3,950,817

TABLE 21

NET YOUTH ALLOWANCES PAYMENTS COMPARISON BY  
FISCAL YEARS FROM BEGINNING OF PROGRAM

Province	Sept. 1964 to March 1965 (7 mos.)	1965-66
Nfld.	881,777	1,591,901
P.E.I.	231,142	395,465
N.S.	1,590,976	2,691,768
N.B.	1,352,716	2,311,244
Ont.	12,652,036	21,978,399
Man.	1,916,217	3,249,490
Sask.	1,990,364	3,414,834
Alta.	2,806,661	4,836,771
B.C.	3,415,086	5,934,292
N.W.T.	15,780	34,176
Yukon	17,060	30,210
NATIONAL	26,869,815	46,468,550

## UNEMPLOYMENT ASSISTANCE

The Unemployment Assistance Act as passed in 1956 and amended in 1957, provides that the federal government may enter into an agreement with any province to contribute 50 per cent of the assistance payments made by the province and its municipalities to persons and their dependents who are unemployed and in need. All provinces and territories have signed agreements under the Act.

Under the Unemployment Assistance Act the federal government continued during the year 1965-66 to share in general assistance payments under provincial programs variously referred to as social assistance, social allowances, social aid, public assistance and general welfare assistance. The agreements signed under the Act provide for provinces and their municipalities to set the rates of assistance and conditions of eligibility on which federal reimbursement is based. Payments to both employable and unemployed persons are shared; the latter group, which constitutes the majority of the caseload, includes persons with varying degrees of disability, those unable to work because of family responsibilities and residents of homes for special care such as homes for the aged and nursing homes. The provinces have agreed as a condition of sharing not to apply the residence test in granting aid to persons coming from another province. Travelling expenses of persons receiving assistance are shared when paid for purposes specified in the agreements.

The federal government also shares in additional assistance paid to needy persons in receipt of old age security pensions, old age assistance, blind and disabled persons allowances and unemployment insurance benefits, where the amount of assistance paid is determined through an assessment of the recipient's basic requirements as well as financial resources. During 1965-66, the federal contribution for such payments amounted to approximately \$8.5 million and more than 75,000 persons were receiving such benefits at the end of the year.

The total payments attributable to this program for the year were \$121,856,174. This represents a 13.3 per cent increase from the previous year's total of \$107,553,374. Of this amount, however, \$20,149,002 was received by Quebec under the contracting-out provisions of the Established Programs (Interim Arrangements) Act. This reduced the direct payments under the Unemployment Assistance Act for the year to \$101,707,172.

The explanation of the increase in expenditures lies largely in the improvement of provincial programs, particularly increases in rates of assistance. The average number of recipients per month during 1965-66 was 676,611, a decrease of 1.5 per cent from the average of 686,914 for 1964-65.

It should be noted that sharing does not extend under the Unemployment Assistance Act to the costs of administration, funeral expenses and expenditures for medical, hospital, nursing, dental and optical care and for drugs and dressings. Mothers' allowance payments are also excluded and in those provinces where needy mothers now are assisted through general assistance, the major portion of the cost of their assistance is excluded on a formula basis.



It has been recognized for some time that a new federal approach to public assistance is needed, one that would not only remove the exclusions referred to above, but that would also provide the basis for the development of a single comprehensive public assistance measure that could cover all persons in need, including those now receiving aid under the present federal-provincial programs of unemployment assistance, old age assistance, blind persons and disabled persons allowances. In the Speech from the Throne of April 5, 1965, the government indicated that it proposed to introduce legislation to be known as the Canada Assistance Plan. Following federal-provincial discussions, a resolution outlining the purposes and scope of the Plan was introduced in the House of Commons by the Minister of National Health and Welfare on March 31, 1966. The resolution indicated that the Canada Assistance Plan was designed to establish a program for sharing with the provinces in the cost of assistance, health care and welfare services provided to persons in need, and in the cost of developing and improving welfare service programs including child and youth welfare programs. It would also provide for the extension of provincial welfare programs to Indians on reservations with prior approval of Indian bands and for assisting the provinces with the cost of extending these programs. The announced intention was that the Plan should be made effective April 1, 1966.

While the development of legislation for the Canada Assistance Plan occupied the greater part of the attention of the Unemployment Assistance Division, the administration of the Unemployment Assistance Act continued as an important responsibility. During the year representatives of the Division travelled to all provinces for discussions on both the administration of the Unemployment Assistance Act and the proposed Canada Assistance Plan. The Divisional field representatives continued their close contact with the provincial administration and their responsibility for examining the documents supporting reimbursement claims.

TABLE 22

FEDERAL UNEMPLOYMENT ASSISTANCE PAYMENTS TO PROVINCES

<u>Province</u>	<u>Payment</u>
Newfoundland	\$ 4,478,045.63
Prince Edward Island	402,611.17
Nova Scotia	1,866,780.51
New Brunswick	1,740,538.42
Quebec	24,573,655.31
Ontario	27,587,561.46
Manitoba	5,602,317.30
Saskatchewan	4,388,534.47
Alberta	11,037,442.55
British Columbia	19,894,370.58
Yukon Territory	70,535.50
Northwest Territories	64,779.34
CANADA	\$101,707,172.24



Recipients of Unemployment Assistance include those who are householders and unemployable. The cheques help to put nourishing food on the family table.





TABLE 23

FEDERAL-PROVINCIAL UNEMPLOYMENT ASSISTANCE AGREEMENTS: FEDERAL SHARE OF ASSISTANCE\*  
AND NUMBER OF PERSONS\*\* ASSISTED, BY PROVINCE, APRIL, JULY, AND OCTOBER, 1965, AND JANUARY, 1966

Province	APRIL 1965		JULY 1965		OCTOBER 1965		JANUARY 1966	
	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted	Federal Share Of Assistance	Number Of Persons Assisted
Newfoundland	\$ 401,276	63,906	\$ 328,349	53,465	\$ 382,430	56,829	\$ 365,674	54,450
Prince Edward Island	29,365	2,631	24,612	1,858	24,124	1,725	31,364	2,373
Nova Scotia	163,113	26,556	144,839	23,750	149,964	23,790	175,943	26,244
New Brunswick	129,862	24,552	102,191	20,093	112,709	20,814	147,111	25,931
Quebec***	3,814,987	247,389	3,522,727	225,367	3,733,173	234,493	3,853,125	251,120
Ontario	2,297,765	130,987	2,224,592	114,286	2,277,762	113,323	2,425,272	129,635
Manitoba	491,081	31,514	431,183	27,941	469,833	27,146	512,083	30,512
Saskatchewan	410,201	39,200	332,637	32,529	350,184	33,222	128,739	18,664
Alberta	921,788	60,352	852,886	55,117	872,234	53,895	978,510	59,156
British Columbia	1,493,397	88,839	1,628,209	87,314	1,632,139	86,075	1,763,881	95,284
Yukon Territory	6,163	334	5,609	288	6,743	267	7,477	355
Northwest Territories	4,559	770	4,205	695	5,373	1,037	5,488	1,203
CANADA	10,163,557	717,030	9,602,039	642,703	10,016,668	652,616	10,394,667	694,927

\* The amounts shown are for the months in which assistance was granted to recipients rather than the months in which the federal share was paid to the provinces.

\*\* Includes dependents.

\*\*\* Includes amounts received by Quebec under the contracting out provisions of the Established Programs (I.A.) Act. These amounts were \$1,742,000 for April, \$1,732,000 for July and October and \$2,275,501 for January.



## OLD AGE ASSISTANCE

The Old Age Assistance Act provides for federal sharing, under agreements, of 50 per cent of the amounts paid by the provinces for assistance to persons who have attained the age of 65 years. Under the authority of provincial legislation, the provinces grant and pay assistance to recipients. In order to obtain the federal share, their decisions must be made in accordance with the provisions of the federal Act. Among other things, the Act provides that assistance is not payable to a person receiving a pension under the Old Age Security Act. Old age assistance, therefore, is not normally paid beyond the age of eligibility established by the Old Age Security Act.

In 1965, the Old Age Security Act was amended to lower the age of eligibility by one year as at January 1st of each year from 1966 to 1970, both inclusive. The change in the age requirement from 70 to 69 years as from January 1, 1966, substantially reduced the number of recipients of old age assistance for the last three months of 1965-66 and the federal expenditure for the fiscal year.

Federal expenditure under the Old Age Assistance Act was also reduced by the discontinuance, as from April 1, 1965, of payments to Quebec in accordance with a supplementary agreement made by Canada with the province under the Established Programs (Interim Arrangements) Act which came into force in 1965. That Act provides that where a province that is participating in a program enumerated in Schedule 1, desires to have that program become one to be wholly administered and financed by the province, a supplementary agreement to that effect may be made by Canada with the province. Under such an agreement, the program continues to operate as before except as to the manner in which the Government of Canada will contribute thereafter and the manner in which accounts are to be submitted.

For 1965-66, federal payments under the Act to nine provinces and the two territories totalled \$26,980,509.70. If payments to Quebec had continued during 1965-66, the amount payable to the province by the Government of Canada would have been \$15,941,412.22. The number of recipients in all provinces and in the territories as at March 31, 1966 was 84,959.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income, including assistance, allowed by the Act are \$1,260 a year in the case of an unmarried person, \$2,220 a year in the case of a married person and \$2,580 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

Federal administration of the Old Age Assistance Act is a responsibility of the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division, Welfare Branch, Department of National Health and Welfare.

## ALLOWANCES FOR BLIND PERSONS

The Blind Persons Act provides for federal sharing, under agreements, of 75 per cent of the amounts paid by the provinces for allowances to blind



persons 18 years of age and over. Under the authority of provincial legislation, the provinces grant and pay allowances to recipients. In order to obtain the federal share, their decisions must be made in accordance with the provisions of the federal Act. Among other things, the Act provides that the allowance is not payable to a person receiving a pension under the Old Age Security Act. Blind persons allowances, therefore, are not normally paid beyond the age of eligibility established by the Old Age Security Act.

In 1965, the Old Age Security Act was amended to lower the age of eligibility by one year as at January 1st of each year from 1966 to 1970, both inclusive. The change in the age requirement from 70 to 69 years as from January 1, 1966, caused a small reduction in the number of recipients of allowances for blind persons for the last three months of 1965-66 which reduced federal expenditure for the fiscal year.

Federal expenditure under the Blind Persons Act was further reduced by the discontinuance, as from April 1, 1965, of payments to Quebec in accordance with a supplementary agreement made by Canada with the province under the Established Programs (Interim Arrangements) Act which came into force in 1965. That Act provides that where a province that is participating in a program enumerated in Schedule 1, desires to have that program become one to be wholly administered and financed by the province, a supplementary agreement to that effect may, with the approval of the Governor in Council, be made by Canada with the province. Under such an agreement, the program continues to operate as before except as to the manner in which the Government of Canada will contribute thereafter and the manner in which accounts are to be submitted.

For 1965-66, federal payments under the Act to nine provinces and the two territories totalled \$3,632,212.05. If federal payments to Quebec had continued during 1965-66, the amount payable to the province by the Government of Canada would have been \$1,840,977.94.

The number of recipients in all provinces and in the territories as at March 31, 1966, was 8,149.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the Act, including any allowances payable, are \$1,500 a year in the case of an unmarried person without a dependent child or children, \$1,980 a year in the case of an unmarried person with a dependent child or children, \$2,580 a year in the case of a married person and \$2,700 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

Federal administration of the Blind Persons Act is a responsibility of the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division, Welfare Branch, Department of National Health and Welfare. The Medical Rehabilitation Division in the Health Branch is responsible for medical decisions.



## ALLOWANCES FOR DISABLED PERSONS

The Disabled Persons Act provides for federal sharing, under agreements, of 50 per cent of the amounts paid by the provinces for allowances to disabled persons age 18 and over. Under the authority of provincial legislation, the provinces grant and pay disability allowances to recipients. In order to obtain the federal share, their decisions must be made in accordance with the provisions of the federal Act. Among other things, the Act provides that the allowance is not payable to a person receiving pension under the Old Age Security Act. Disability allowances, therefore, are not normally paid beyond the age of eligibility established by the Old Age Security Act.

In 1965, the Old Age Security Act was amended to lower the age of eligibility by one year as at January 1st of each year from 1966 to 1970, both inclusive. The change in the age requirement from 70 to 69 as from January 1, 1966, had little effect on the number of recipients or on the federal expenditure for the fiscal year.

Federal expenditure under the Disabled Persons Act was reduced by the discontinuance, as from April 1, 1965, of payments to Quebec in accordance with a supplementary agreement made by Canada with the province under the Established Programs (Interim Arrangements) Act which came into force in 1965. That Act provides that where a province that is participating in a program enumerated in Schedule 1, desires to have that program become one to be wholly administered and financed by the province, a supplementary agreement to that effect may, with the approval of the Governor in Council, be made by Canada with the province. Under such an agreement, the program continues to operate as before except as to the manner in which the Government of Canada will contribute thereafter and the manner in which accounts are to be submitted.

For 1965-66, federal payments under the Act to nine provinces and the two territories totalled \$14,979,429.30. If federal payments to Quebec had continued during 1965-66, the amount payable to the province by the Government of Canada would have been \$8,821,586.43.

The number of recipients in all provinces and in the territories as at March 31, 1966, was 54,191.

The Act specifies \$75 a month as the maximum amount in which the Government of Canada may share. The maximum amounts of income allowed by the Act, including any allowance payable, are \$1,260 a year in the case of an unmarried person, \$2,220 a year in the case of a married person and \$2,580 a year in the case of a married person with a blind spouse. Agreements between the Government of Canada and provincial governments stipulate these amounts.

Federal administration of the Disabled Persons Act is a responsibility of the Old Age Assistance, Blind Persons and Disabled Persons Allowances Division, Welfare Branch, Department of National Health and Welfare. The Medical Rehabilitation Division in the Health Branch provides advisory services on the medical aspects of the program.

TABLE 24

## FEDERAL PAYMENTS TOWARDS ASSISTANCE TO THE AGED, BLIND AND DISABLED

Province	Old Age Assistance		Blind Persons Allowances		Disabled Persons Allowances	
	Number of recipients March, 1966	Payments	Number of recipients March, 1966	Payments	Number of recipients March, 1966	Payments
Alberta .....	5,453	\$ 2,795,633.33	448	\$ 307,675.85	1,933	\$ 851,832.95
British Columbia .....	5,478	2,836,336.10	532	358,286.73	2,385	1,061,500.12
Manitoba .....	4,241	2,188,141.38	364	251,385.52	1,566	688,649.58
New Brunswick .....	4,200	2,161,779.05	626	438,437.35	2,320	1,030,637.14
Newfoundland .....	4,080	2,121,068.34	445	304,202.76	1,817	804,197.15
Nova Scotia .....	4,423	2,188,256.57	714	487,503.95	3,474	1,524,102.87
Ontario .....	19,991	10,006,000.88	1,820	1,153,040.47	18,406	7,823,575.62
Prince Edward Island .....	988	498,378.08	72	47,371.74	788	349,880.87
Saskatchewan .....	3,975	2,097,641.77	366	248,003.93	1,871	824,776.76
Northwest Territories .....	133	73,721.70	44	32,310.00	26	19,376.24
Yukon Territory .....	26	13,552.50	6	3,993.75	2	900.00
NATIONAL .....	52,988	\$ 26,980,509.70	5,437	\$ 3,632,212.05	34,588	\$ 14,979,429.30



## NATIONAL WELFARE GRANTS

The National Welfare Grants program was established in the fiscal year 1962-63. Designed to assist in the development and strengthening of welfare services in Canada, the program has some components administered in co-operation with the provincial departments of welfare on a financial matching basis, while others are directly administered by the Department with no sharing required. Total expenditures in the 1965-66 fiscal year were \$1,131,749.

The general welfare services provision makes funds available for demonstration and other projects designed to strengthen and extend both public and voluntary welfare agencies within the provinces. Assisted projects included a demonstration in which social rehabilitation was seen as a process and an attitude, both to be viewed in their broadest sense, of helping an individual or family with a social, mental, or physical disability, to reach their maximum functioning capacity in relation to their potential. Another project had as its purpose an integrated variety of social and welfare services to persons living in a slum environment, to assist those persons to adapt to changes in that environment and to assist them in their preparation for moving to an improved physical environment. Projects were supported that promoted citizenship participation in self-help and community improvement programs, with particular emphasis on citizens planning structure, and that also promoted a concerted approach to the provision of welfare services through co-ordinated and integrated activity on the part of organizations and agencies involved.

Bursaries may be awarded by the provinces, for graduate study at Canadian schools of social work, to applicants who have completed at least their undergraduate work with satisfactory standing, require financial help, and undertake to accept employment in welfare within the province for a prescribed period following completion of their studies. The Department made matching grants to seven provinces which awarded a total of 76 bursaries.

Training grants are provided to assist the provinces with the cost of awards they make to staff members of both voluntary and government agencies who have been given leave of absence to undertake full-time graduate studies at Canadian schools of social work up to the Master's degree. Nine provinces and the Yukon Territory participated in a total of 94 individual awards.

Eight provinces participated in the staff development grants which are designed to assist a wide variety of training projects for welfare personnel in both private and public agencies. This provision, under which a total of 486 individuals were assisted, has no federal restriction with respect to previous education and training.

Teaching and Field Instruction grants are available on a non-matching basis to Canadian schools of social work to assist in meeting the costs of additional staff required to cope with the increased registration stimulated by the other provisions of the program. Five graduate schools in four provinces were assisted to maintain 42 staff members.

TABLE 25

EXPENDITURES UNDER NATIONAL WELFARE GRANTS PROGRAM,  
BY PROVINCE, FOR THE YEAR ENDED MARCH 31, 1966

Province	Research	Bursaries	Fellowships & Scholarships	Training Grants	Teaching & Field Inst.	Staff Development	Welfare Services	Totals
Newfoundland	\$ -	\$ -	\$ 4,380	\$ 1,176	\$ -	\$25,228	\$ 12,429	\$ 43,213
Prince Edward Island	-	-	-	1,500	-	-	9,771	11,271
Nova Scotia	13,175	2,500	4,219	10,604	19,238	5,705	35,460	90,901
New Brunswick	-	6,671	-	2,776	-	1,749	20,374	31,570
Quebec	-	-	30,125	-	-	-	-	30,125
Ontario	44,816	30,688	27,000	8,781	103,710	59,097	188,742	462,834
Manitoba	10,414	3,040	5,600	37,405	49,145	6,571	-	112,175
Saskatchewan	3,346	6,245	2,026	32,229	-	516	16,505	60,867
Alberta	-	1,500	-	10,812	-	861	67,397	80,570
British Columbia	40,272	9,425	8,834	5,000	61,194	121	71,124	195,970
Yukon	-	-	-	967	-	-	11,285	12,252
TOTALS	\$112,023	\$60,069	\$82,184	\$111,250	\$233,287	\$99,848	\$433,087	\$1,131,748



Fellowships are awarded by the Department on a national competitive basis, for advanced study at Canadian and foreign universities, to applicants who have demonstrated ability of a high order in administration, teaching or research in welfare work. Ten fellowships were given for doctoral programs for tenure in Canada and the United States. Five of the successful applicants were faculty members of Canadian schools of social work, while five held senior positions in Canadian welfare agencies. Fellowship awards carry a commitment to subsequent welfare employment in Canada.

Scholarships are also awarded by the Department on a national competitive basis to university graduates with high academic standing for study in Canadian schools of social work. Thirteen of twenty awards went to Master's degree candidates in their second year of graduate study, the other seven to first year students. Scholarships, like fellowships, carry a commitment to subsequent employment in Canada. Both kinds of awards may be renewed on the basis of satisfactory performance. Twenty fellowships and forty scholarships will be offered for tenure during the 1966-67 academic year.

**Welfare Research:** The research provision is designed to complement the other aspects of the program by financing surveys, studies, and research projects which hold promise of significantly assisting in the organization, co-ordination, and staffing of welfare services and of developing new services focussed on the prevention of welfare problems and dependency. Federal funds totalling \$112,023 were contributed to eleven approved projects. The sponsors were two national voluntary agencies, three provincial departments of public welfare, two schools of social work and two local voluntary agencies. Five of the projects had been assisted in the previous year and were approved for continued help in 1965-66.

The six new projects comprised a study of the school performance of children of families in receipt of public assistance, an investigation of individual and family characteristics associated with chronic dependency, the evaluation of services to public assistance recipients, a study of a group of single unemployed men, an enquiry into the effect of cultural differences on the provision and outcome of social work services and a design grant for the study of problems of social and economic adjustment of Indians and Metis to urban living. Another grant was approved but, because the need for qualified research personnel is acute, the agency concerned was unable to obtain a suitable person and so the grant was not used.

## EMERGENCY WELFARE

The Emergency Welfare Services Division derives its responsibilities from the new Order-in-Council PC 1965-1041 which has redefined the civil emergency powers, duties and functions of the Department in emergency planning and operations.

Emergency Welfare Services Division is responsible for:

- (a) Assisting provincial departments of public welfare and municipalities in organizing and operating the five emergency



welfare services consisting of Emergency Clothing, Emergency Feeding, Emergency Lodging, Registration and Inquiry and Personal Services; and planning for continuity of essential welfare programs.

- (b) Preparing and implementing plans for the continuity of essential welfare programs of the Department during an emergency.
- (c) Co-ordinating a welfare mutual support program for emergency welfare services between provinces and between Canada and the United States.

Emergency Welfare Services planning is based upon the premise that preparation can reduce human and material losses in the event of emergency, caused by enemy action or as the result of peacetime disaster. The need for emergency welfare services was amply demonstrated by several disasters which occurred in Canada during the year. The Ville Lasalle explosion and the Manitoba floods of 1965 and 1966 emphasized again the vital importance of maintaining a state of readiness through prior planning by all levels of government to cope with human needs during emergency.

The main efforts of the Division remained concentrated upon the development of the five emergency welfare services throughout Canada with the provincial departments of public welfare. Increased emphasis was placed upon the planning for continuation of essential welfare programs in emergency by provinces.

#### Organization

Since 1961 the Division has consisted of a small staff responsible for organization and training in the five emergency welfare services, continuity of government planning, developing emergency equipment and systems, and in an emergency taking on operational roles to fulfill designated emergency functions. Liaison with the provinces was maintained through Regional Representatives located in British Columbia, Alberta (for the prairie provinces), Quebec, Ontario and Nova Scotia (for the Atlantic provinces). Each provincial department of public welfare has accepted responsibility for the development of the emergency welfare services and planning for the continuation of essential welfare programs in emergency.

#### Program Development

Co-ordination of overall emergency preparations continued to be carried out through joint planning with other federal departments of government and liaison was maintained with several professional and trade associations and universities in Canada and the United States.

The annual Federal-Provincial EWS Directors Conference held in October 1965 provided the opportunity to review plans, policies and procedures in the interests of uniformity for emergency welfare operations across Canada.



Provincial emergency capabilities were increased by the additions to the national and provincial holdings of operational systems including forms and equipment such as mobile feeding units and mobile clothing sorting units. Some of the mobile feeding units were used during actual disaster operations, such as the Ville Lasalle explosion and the Manitoba floods, once again proving their usefulness.

#### Training and Training Materials

A total of 108 provincial candidates attended courses given by the Division at the Canadian Emergency Measures College. A pilot course "Survival Planning for Welfare Institutions" was provided for superintendents of welfare institutions. Members of the Division staff conducted orientation courses for 50 candidates in Prince Edward Island and for representatives from the Northwest Territories and the Yukon. Individual officers have continued to assist in training at provincial courses and have given many lectures to other interested organizations. Service manuals for Emergency Feeding, Registration and Inquiry and Personal Services were published and distributed. The French version of the "Registration and Inquiry" manual was also completed and is available for distribution. Slides and transparencies for training use were produced and made available to the provinces. All precis in French and English have been revised and work has proceeded on a new precis "Survival Planning for Welfare Institutions".

#### Public Information

The preparation and production of public information material, designed to encourage self-help measures by the population of Canada, continues to be an important activity. Additional quantities of pamphlets have been produced and distributed to the public and stockpiled in quantity throughout the country.

The television clip "Your Emergency Pack" and the radio series "Your Health, Your Welfare" continued to reach the public throughout the year. Production of new displays and modernizing older displays was undertaken in conjunction with Information Services and the displays were shown at various professional and public exhibitions and conventions. An article "The State of Emergency Welfare Services" was contributed to the February issue of the "EMO National Digest" and other articles published in trade and professional journals.

#### Continuity of Government

Revision of the "Departmental Readiness Plan" continued in order to ensure that key personnel of the Departmental Readiness and Relocation Units are prepared to assume their duties in event of emergency. Assistance was provided to the provincial departments of public welfare in developing their measures both for continuity of their departments and essential welfare programs through liaison visits and the completion and distribution of a prototype plan.

## The Program Management Plan

In order to facilitate the orderly and efficient handling of Emergency Welfare Service applications and regulations, a comprehensive five-year plan, 1954-1959, was introduced in the provinces by the Division. The plan is intended as a guide to the development of provincial agencies under the Financial Aid Program of the Federal government.

## Research and Studies



A vital part of the work of the Emergency Welfare Services Division is the teaching of emergency feeding. Here, at the Canadian Emergency Measures College, Arnprior, Ontario, course members prepare a massive meal outdoors.

## The Department's International Welfare Work

The Deputy Minister of National Welfare, the Canadian representative on the Executive Board of the United Nations Children's Fund (UNICEF), was elected Chairman of the Board in February 1954 after serving for several years as Chairman of the Program Committee. At the session of UNICEF held in June 1954 a budget of \$20.5 million was approved to assist





## The Program Management Plan

In order to facilitate the orderly and efficient build-up of Emergency Welfare Services organization and equipment, a comprehensive five-year plan, 1965-1970, was introduced to the provinces by the Division. The plan is intended as a guide to the development of provincial capability under the Financial Aid Program of the federal government.

## Research and Studies

The Division convened a working group on "Emergency Welfare Services in Peacetime Disasters". The group, comprised of government and non-government representatives, made valuable recommendations concerning emergency welfare equipment and procedures for use in peacetime disaster.

Studies continued in the field of welfare resources, both human and material, in order to determine the possible employment of related professional groups in event of emergency.

A study paper on the organization of welfare services in emergency areas or units was completed and distributed. Results of exercises using the emergency unit concept are being awaited.

Officers of the Division attended professional conferences, conventions, courses and meetings to maintain an up-to-date picture of activities in particular fields which influence emergency planning.

## International

Discussions took place with welfare representatives of the United States Department of Health, Education and Welfare, in Washington, D.C., to further the co-ordination of mutual support activities under the U.S. / Canada Civil Emergency Planning Agreement of 1963.

Papers were prepared by the Division on "Problems of Group Feeding in Emergency", and "Social Welfare Problems in Recovery" for the NATO Scientific Working Party.

## INTERNATIONAL WELFARE

Canada's participation in the international welfare activities of the United Nations and its Specialized Agencies and of other international and national organizations is co-ordinated by the International Welfare Services Division. During the year a number of significant events occurred in the Department's international welfare work.

The Deputy Minister of National Welfare, the Canadian representative on the Executive Board of the United Nations Children's Fund (UNICEF), was elected Chairman of the Board in February 1966 after serving two consecutive terms as Chairman of its Program Committee. At the session of UNICEF held in June 1965 a budget of \$26.5 million was approved to assist



200 long-term projects. At the invitation of the government of Ethiopia, approval was given to the holding of the 1966 annual meeting in Addis Ababa.

The work of UNICEF as a true example of international co-operation and understanding was recognized when it was awarded the Nobel Peace Prize for 1965. UNICEF continued to receive a contribution of \$1 million from the Canadian government for the year under review and \$938,000 was raised by the National UNICEF Committee.

The International Labour Organization's Committee of Experts on Social Security was reconstituted during the year and the Deputy Minister of National Welfare, a former Chairman, was reappointed as a member until December 31, 1968. At the request of the International Labour Organization, the Department completed a review of several of the I. L. O. 's social security conventions, with a view to their combination in a comprehensive document. Questionnaires and reports were completed by the Research and Statistics Division for the International Social Security Association, and a statement prepared on recent welfare developments in Canada for the Human Rights Year Book.

Established by the Economic and Social Council, the ten country U. N. Ad Hoc Working Group on Social Welfare, chaired by the Deputy Minister of National Welfare, met in April 1965 to analyse the United Nations social services program and to recommend ways of strengthening it. As a result, the Group asked the Social Commission to recommend the holding of a Conference of Welfare Ministers and their senior advisers to discuss the question of social welfare in national development. It now appears that such a conference will take place in 1968.

Briefing material on a variety of social questions was prepared for the Canadian delegations to the 39th Session of the Economic and Social Council and to the Third Committee of the General Assembly. An extensive commentary was prepared on the role that the Social Commission should play within the framework of the United Nations to help meet the needs of member states in the social field.

Preliminary discussions were held with social security officials in the United Kingdom, France and West Germany on the question of bilateral reciprocity between Canada and those countries on certain aspects of social security. The Director General of Income Security, the Legal Adviser and the Director of International Welfare Services represented Canada during these meetings. Arrangements were being made at the end of the year for discussions with United States officials.

The Special Assistant to the Director General of Welfare Assistance and Services attended the International Family Conference held in Rome in July 1965. Organized by the International Union of Family Organizations, the conference dealt with the numerical importance, characteristics, values, and aspirations of new families in a changing world. The Special Assistant and the Consultant on Family and Child Welfare were appointed to the Preparatory Committee for the 1967 Conference in Quebec City.

The Director General of Special Programs and other officers represented the Department at the Second National Workshop on Canada's



Participation in International Development at l'Esterel, Quebec, from November 18 - 21, 1965. This workshop was organized by the Overseas Institute of Canada in co-operation with the International Co-operation Year Council and the Centennial Commission. The Conference considered ways in which Canadian organizations, particularly in the private sector, could best serve developing countries during the latter half of the United Nations Development Decade.

The Special International Co-operation Year fitness and amateur sport projects, undertaken by two Canadian associations, were continued during the year through assistance from grants under the Fitness and Amateur Sport Act. The Canadian Association for Health, Physical Education and Recreation, in conjunction with the International Welfare Services Division, arranged academic and observation training programs for five young community leaders from British Guiana (Guyana), Costa Rica, Malaysia, Tanzania and Tunisia. The National Council of the Young Men's Christian Association of Canada arranged for a group of Canadian coaches to be sent to the Caribbean where sports clinics were held in Jamaica, Barbados, Trinidad and Tobago and British Guiana (Guyana) and for a number of West Indian athletes to attend short periods of training in Canada.

The International Welfare Services Division continued to provide technical services to the External Aid Office in arranging academic and observation programs for foreign students in social welfare in Canadian universities and other institutions, advised the External Aid Office and other agencies on welfare projects for which Canadian assistance was sought, and assisted in recruiting suitable Canadian experts for overseas assignments.

The Department continued to participate in the work of several inter-departmental committees dealing with international matters and to be actively associated with several organizations concerned with international development, including the Overseas Institute of Canada, the National UNICEF Committee, the United Nations Association in Canada, and the Canadian Committee of the International Conference of Social Work.

## FITNESS AND AMATEUR SPORT

The five years which have elapsed since the passage of the Fitness and Amateur Sport Act provide some opportunity for an evaluation of progress which has been made up to and including the year 1965-66. The Act has as its main purpose assistance to the promotion of amateur sport and the raising of fitness levels among Canadians of all ages.

Under the Act a number of different programs have been developed. Grants are made to national organizations or to organizations which carry on work of national importance, and to the provinces which are responsible for the program at the provincial and local levels. This assistance to fitness and amateur sport activities at all levels from the playgrounds to international competitions includes, or is supplemented by, a number of different kinds of grants and services. Financial aid is given for sending



Canadian teams to international events, for the holding of national championships and for the training of coaches and officials required to prepare competitors at all levels of participation. Grants encourage research designed to improve fitness and assist organizations conducting programs dedicated to fitness, such as the YMCA's and YWCA's. Scholarships and fellowships are awarded to assist in increasing the numbers of professionally trained physical educators and recreation specialists. A broadly based educational and information service is provided through which films, manuals and other visual materials are produced for use in program areas of special need. Finally, the Department carries on an active program of consulting and co-ordinating services designed to assist all concerned with the program.

It is always difficult to assess accurately the impact of a program such as this. However, the increased success of Canadians in international competitions since 1961 is self-evident. The record of Canadians in the recent Olympic Games in Tokyo was very creditable and the spectacular upsurge of achievement at the British Empire and Commonwealth Games in Jamaica has been the subject of very considerable comment in Canada and other countries. There is growing confidence that our record will continue to improve at next year's Pan-American Games at Winnipeg. Improvements in Olympic and associated competition, as well as in such sports as skiing, rowing and swimming, which have extensively utilized the resources of the program, would seem to indicate that it has had some impact in helping us to assume our rightful place in international sport.

Certainly this evidence of achievement at the ultimate medal-winning level gives some reason for satisfaction although, none for complacency. The problems involved in significantly increasing the capacity of the great majority of Canadians to enjoy, to the utmost, the opportunities they have available for physically active recreational pursuits are still very great. Their solution will involve the co-operation of many voluntary agencies as well as sports, recreation and government organizations.

A number of individual matters received consideration during the year.

The question of establishing either a national sports training centre or regional sports training centres or some combination of the two brought forth widely diverging views. All facets of this complex problem will require considerable study.

Another matter that received consideration was how best to assist the different sports governing bodies to carry on their increased administrative functions. The greatly expanded activities of most of these organizations, as a result of the program, have resulted in a very significant increase in the administrative detail required in their operation. Administrative grants are being made as a temporary measure but the extent to which federal assistance should be provided for such purposes is a question which will need further consideration.

Due to the concern which has been expressed in many quarters about the future of amateur hockey in Canada, a study of the present situation will be undertaken shortly.



The lack of co-ordinated competition through local, regional and national levels remains a major problem in many sports. In several Canadian amateur sports there is no system of qualification from a lower level of championship to a higher level. In fact, in some sports, the national competition is still the only annual championship. As sports governing bodies have a major interest in their best team and individuals, there is often a danger that they will overlook the lower levels of development and competition. This vacuum of competition at the local and regional levels is a matter on which discussions are being held, with those concerned, both in the sports governing bodies and in the provincial government offices of fitness and amateur sport.

With this general introduction and comment on on-going projects, the Annual Report of the Fitness and Amateur Sport Program for 1965-66 is presented.

#### National Advisory Council on Fitness and Amateur Sport

Under the Fitness and Amateur Sport Act, a thirty member Council advises the Minister on the program. Members of the Council have been selected from persons associated with sports governing bodies, university faculties of physical education, community recreation, sports medicine, business and the press. At least one member must be appointed from each province and members ordinarily serve for three years. The Council meets two or three times each year to consider policy matters and to make recommendations on requests for assistance.

The program is implemented through five basic approaches:

- (1) grants to Canadian sports governing bodies and other non-profit organizations conducting physical fitness programs;
- (2) grants to the provinces;
- (3) scholarships, fellowships and bursaries;
- (4) research grants;
- (5) assistance provided directly by the Department's Fitness and Amateur Sport Directorate and its information services.

#### Grants to National Organizations

Most amateur sports in Canada are governed by a national organization, the national sports governing body, which sanctions local, provincial and national competitions, arranges for Canadian participation in international championships and technical conferences, and frequently conducts coaching clinics for its members.

Under the Fitness and Amateur Sport program grants are made to nearly forty such organizations to cover a percentage of the costs of their activities. For example, when the Canadian Amateur Figure Skating



Association sent a team of twenty to the World Championships in Davos, Switzerland, in March, 1966, the Association was supported by a grant of \$7,312 covering one half the team's travel and living expenses. Also, the Fitness and Amateur Sport program assisted the Canadian Lawn Tennis Association to attract more than 3,000 players to its cross-Canada training clinics during the summer of 1965 through a grant of \$15,730 which paid the full travel and living costs of the three professional coaches who conducted the clinics. The Canadian Amateur Swimming Association received a federal grant of \$16,500 which provided half travel costs for over 200 athletes and officials participating in the national swimming and diving championships at Red Deer, Alberta, in August, 1965.

Program-operating agencies are also aided by the Act. Several agencies such as the Royal Canadian Legion, the Boys' Clubs and the Girl Guides receive annual grants to conduct leadership camps and clinics.

The Canadian Olympic Association and the British Empire and Commonwealth Games Association receive assistance through the program. The COA received \$30,000 as assistance for its administrative functions during the last calendar year. Administrative grants to organizations such as the COA are being made on a temporary basis, the Association having undertaken to make its expanded program self-supporting as soon as possible. The British Empire and Commonwealth Games Association received \$25,000 to help send the Canadian team to the August 1966 Games in Jamaica. Assistance of this kind for international competition is provided on a continuing basis.

To assist programs during the 1965-66 fiscal year, national organizations received \$1,595,223 in grants, of this total \$202,898 supported 459 participants representing Canada in international competitions, \$221,786 aided 3,813 participants in national championships and \$349,339 assisted training programs.

Through the program an endeavour is made to strengthen Canada's performance abroad by providing expenses for national teams to train together for several weeks before departure from Canada. As an example, federal financial assistance enabled the national ski team to train in Canada during the summer, fall and early winter months preceding the 1966 European competitions. The national ski team also received assistance to conduct extensive summer training in preparation for the World Championships in Portillo, Chile, in August, 1966. Similar grants enabled the national hockey team to hold a concentrated training program before going to Yugoslavia for the World Hockey Championships in March, 1966.

At the same time, sports governing bodies received assistance to improve the depth of competitive performances at the national level. Before the era of the Fitness and Amateur Sport program, national championships in many sports were rarely more than regional championships because few competitors from outside the host region could afford to participate. Federal grants for national championships are designed to encourage representation from all parts of the country by helping to ensure that no qualified athlete is barred from competition because of lack of funds.



Sports governing bodies have been encouraged to give first priority to the development of national programs as opposed to those which are international in type. National championships are given priority over international competitions in grant awards to organizations not displaying a strong national development.

The training of coaches and officials and youth leaders has been greatly increased with the assistance of federal grants. During a typical clinic, a group of volunteers from either a particular region or from across the country assembles to attend lectures and demonstrations by senior people in his field and to discuss the advantages and disadvantages of particular methods. The volunteer then returns to his home area to impart his newly acquired knowledge and enthusiasm to a much greater number of coaches, athletes, officials, leaders, etc. These clinics for officials have been most successful and have contributed to the improvement of officiating at competitions from the viewpoint of both the athlete and spectator. The resultant growing body of competent and responsible referees, umpires, judges, and other officials will also be extremely valuable, now that Canada is on the verge of hosting several major international competitions.

In order to strengthen the administration of organizations conducting sports and fitness programs, a series of administrative grants were initiated during the fiscal year. The majority of sports governing bodies have always been operated by volunteer members and usually the national office of these associations is in the home of the current president or secretary. These officers have generally provided their own secretarial services which are, at best, extremely limited. When grants enabled these organizations to expand their programs, they did not have the administrative facilities to handle the resulting expansion of work. These new funds have enabled them to meet general office expenses and to contribute to the travel costs of members attending executive and annual meetings.

Grants are occasionally awarded to national organizations for special projects. During the past fiscal year, for example, a grant of \$21,405 was awarded to the Canadian Volleyball Association to assist in the staging of a cross-Canada exhibition tour between the Russian and American national teams. The tour played before large audiences across the country and stimulated widespread interest in the game. As another special project last year, the Track and Field Committee of the Amateur Athletic Union received \$4,500 to assist the development of the national standards program. Under another, several professional associations jointly received \$25,000 towards the cost of organizing a national recreation symposium for Centennial Year entitled, "Man and His Leisure".

#### Staging of Games

Federal assistance is provided for the staging of national and international multiple games in Canada.

During 1965-66 the Pan-American Games (1967) Society was given \$220,000 toward the initial cost of organizing the 1967 Games in Winnipeg. This first grant was made according to a four-way agreement signed in April, 1965. It provides for the cost-sharing of the Pan-American Games



(1967) Society's net budget of \$3,460,000, to which the Government of Canada will contribute \$1.5 million, the Province of Manitoba \$1.25 million and the city of Winnipeg \$710,000. Other federal assistance was subsequently provided through a grant, matched by the province, of \$750,000 toward the installation of a permanent Olympic pool. In addition, the Department of National Defence will give considerable assistance through the use of its services and resources available in the Winnipeg area. More than 3,000 athletes from some thirty countries in the Americas are expected to compete in the Games' twenty scheduled events.

In 1965, a grant of \$38,500 was given to Olympic '72, the organization established to promote Banff, Alberta, as the site for the 1972 Winter Olympics. Despite an excellent presentation to the International Olympic Committee in April, 1966, the bid was unsuccessful.

An initial grant of \$347,500 of an eventual maximum of \$700,000 was provided to the organizing committee of the First Canadian Winter Games to be held in Quebec City in February, 1967. The committee has invited teams from all provinces and territories to participate in hockey, skiing, basketball and ten other activities. This first all-Canadian multiple games event promises to be a significant step forward in the development of Canadian amateur sport.

#### Grants to the Provinces

Under a three-year federal-provincial agreement signed in September 1964, \$1 million in Fitness and Amateur Sport grants is annually made available to the provinces. Each province or territory may receive a basic grant of \$35,000 with the balance of the \$1 million distributed according to population. During the fiscal year, all provinces and territories, except Quebec, participated in the program.

Through this program the federal government has paid sixty per cent of the cost of approved provincial projects, except that for scholarships and bursaries to physical education undergraduates, where recipients are nominated by the provinces, the Department pays the full cost.

The all important development of services at the community level is encouraged through this federal-provincial program. The largest portion of grant funds is devoted to the support of clinics and other training projects, conducted either by provincial branches of the sports governing bodies, or by the province itself. These grants generally cover board and lodging of participants, fees for instructors and, in some cases, travel expenses. The provinces have attempted to bolster sports governing bodies at the provincial and local level by offering secretarial assistance and financial aid for administration. British Columbia, Manitoba and Nova Scotia have used grants to assist in the operation of provincial Fitness Councils. A special grant of \$85,000 was made to the Province of Newfoundland to assist in the renovation of a former air force base at Torbay for use as a provincial training centre. Some provinces are using part of their allocation to enable communities to hire full-time professional recreation staff.



A total of \$703,059 in grants was made in 1965-66 as compared to \$450,000 in the previous fiscal year.

#### Scholarship and Fellowship Program

In order to continually improve the professional competence of physical education teachers in Canadian schools and universities, scholarships and fellowships are awarded to postgraduate students in physical education. One hundred and twenty-eight awards were made during the year, involving an expenditure of \$208,037. Forty of the recipients were working towards their doctorate and 87 towards a master's degree. The number of master's students attending Canadian universities increased from 15 last year to 30 this year. No Canadian university yet offers a doctoral program in physical education.

All scholarship recipients are obligated to work at least two years in Canada, or a period equivalent to the duration of the award. Follow-up studies reveal that upon completion of their studies, scholarship holders were employed as teachers, department heads, and supervisors in Canadian school systems, universities, and recreational agencies. There is still a serious shortage of trained women despite a general increase in the number of women employed during the past year.

All applications for awards are reviewed by the Scholarship Committee of the National Advisory Council, composed of representatives of physical education schools and the provincial governments. All awards were made on the basis of the Committee's recommendations.

Undergraduate scholarships and bursaries for students enrolled in a degree course in physical education or recreation are awarded under the provincial program. During the fiscal year of 1965-66 a total of 529 awards were made as compared with 483 in the previous year.

#### Fitness Research

Under the Fitness and Amateur Sport research program, financial assistance is given for investigation of problems related to fitness. Grants are made to assist individual research workers and to operate three university research units.

The Research Review Committee of the National Advisory Council, a group of leading scientists, reviews all grant applications and makes necessary recommendations in addition to taking an active part in the total fitness research program.

Most of the research investigations which have so far been supported concern the physiological effects of exercise and competitive sport. As one example, the research unit at the University of Toronto is attempting to determine the importance of the endurance factor in fitness. Individual projects include studies on the factors which limit physical performance, on the physical capacity for exercise and on fitness standards for Canadian school children. A few studies have been sponsored on the psycho-socio-



logical aspects of sports participation and the Research Committee expects that more work will be undertaken in this area in the future.

During the fiscal year, 17 individual studies were assisted by an expenditure of \$149,834. An additional sum of approximately \$134,000 was granted to the research units at the Universities of Alberta, Montreal and Toronto under a five-year agreement which began with the 1964-65 fiscal year.

#### Services of the Department

An integral part of the Fitness and Amateur Sport program is the consultant and information service provided by the Department.

Four professional staff members were added to the Directorate during the year to serve as consultants to national organizations receiving assistance from the program. The Directorate's staff offers technical and administrative advice, visits and reports on projects for which federal assistance has been provided and endeavours to co-operate with fitness, amateur sport and physical recreation programs in every possible way.

The Department is also concerned with a wide variety of educational materials on fitness and amateur sport. It co-operates with the Queen's Printer and the National Film Board in producing films, filmstrips, instructional manuals and printed materials of a technical nature. Its "How To" kits are particularly noteworthy. A typical kit consists of a promotional film, an instructional film, filmstrips and an instructional manual. During the year kits on skiing and family camping were completed and work began on kits for badminton, volleyball, water sports and recreation.

Information on the Departmental program is also provided. One booklet currently being prepared outlines the aims and services of the program, another will contain the revised criteria regarding postgraduate scholarships and fellowships.

A clearinghouse service is maintained for information on the work of the sports governing bodies. A calendar of Canadian sports events is published semi-annually which includes the dates and locations of such national events as championships, clinics for coaches and officials, annual meetings and international sports events involving Canadian participants. A series of short, promotional television clips on the general theme of fitness is to be produced.

Through a grant to the University of Ottawa, a Documentation Centre is maintained and operated on behalf of the Department to provide a national archive on fitness and amateur sport matters.

TABLE 26

ALLOCATIONS AND GRANTS  
UNDER  
FEDERAL-PROVINCIAL FITNESS AND AMATEUR SPORT PROGRAM  
1965-66

<u>PROVINCE</u>	<u>ALLOCATION</u>	<u>GRANTS</u>
Newfoundland	\$ 49,828	\$ 49,565
Prince Edward Island	38,227	38,227
Nova Scotia	57,891	54,081
New Brunswick	53,595	52,291
Quebec	202,841	--
Ontario	233,486	104,007
Manitoba	63,876	63,876
Saskatchewan	63,317	53,410
Alberta	78,324	34,398
British Columbia	87,377	84,890
Northwest Territories	35,759	35,477
Yukon	35,479	27,837
	<u>\$ 1,000,000</u>	<u>\$ 598,059</u>
Supplementary Grants to Newfoundland <sup>(1)</sup> and New Brunswick <sup>(2)</sup>		<u>105,000</u>
		<u>\$ 703,059</u>

(1) A grant of \$85,000 was made to the Province of Newfoundland to assist in developing a provincial training centre by restoring the facilities at Torbay Airbase.

(2) An additional allocation of \$20,000 was made available, on request, to the Province of New Brunswick to finance supplementary projects under the terms of the agreement.



TABLE 27

SCHOLARSHIPS AND FELLOWSHIPS  
AWARDED TO POST-GRADUATE STUDENTS  
UNDER FITNESS AND AMATEUR SPORT PROGRAM  
1965-66

<u>Type of Award</u>	<u>No.</u>	<u>Amount</u>
Post-Graduate Scholarships		
Master's Level		
Summer School	43	\$ 37,200
Full Year	44	88,000
Doctorate Level		
Summer School	17	17,550
Full Year	23	46,000
(Dependent's Allowance - \$500 - Full Year Doctorate)		10,500
Travel Allowance - Full Year Master's in Canada and Full Year Doctorate		5,707
Special Fellowships	<u>1</u>	<u>3,080</u>
	<u>128</u>	<u>\$208,037</u>

TABLE 28

UNDERGRADUATE SCHOLARSHIPS AND BURSARIES  
AWARDED UNDER FITNESS AND AMATEUR SPORT PROGRAM  
1965-66

PROVINCE	AWARDS	AMOUNTS	TOTAL NO. AWARDS	TOTAL AMOUNTS
Newfoundland	1 - Scholarship 43 - Bursaries	\$ 500 13,150	44	\$ 13,650
P. E. I.	3 - Scholarships 23 - Bursaries	1,500 7,000	26	8,500
Nova Scotia	7 - Scholarships 77 - Bursaries	3,500 18,050	84	21,550
New Brunswick	5 - Scholarships 21 - Bursaries	2,500 7,300	26	9,800
Quebec	Nil Scholarships Nil Bursaries	- -	-	-
Ontario	3 - Scholarships 188 - Bursaries	1,500 42,625	191	44,125
Manitoba	Nil Scholarships 29 - Bursaries	- 4,500	29	4,500
Saskatchewan	16 - Scholarships 20 - Bursaries	6,800 9,800	36	16,600
Alberta	6 - Scholarships 58 - Bursaries	2,100 17,000	64	19,100
British Columbia	12 - Scholarships 17 - Bursaries	6,000 5,550	29	11,550
N. W. T.	Nil Scholarships Nil Bursaries	- -	-	-
Yukon	Nil Scholarships Nil Bursaries	- -	-	-
TOTALS	53 - Scholarships) 476 - Bursaries)	24,400 124,975 \$149,375	529	\$149,375



TABLE 29

RESEARCH GRANTS  
AWARDED UNDER FITNESS AND AMATEUR SPORT PROGRAM  
1965-66

<u>Name</u>	<u>Amount</u>
Institute of Cardiology - Montreal	\$ 3,646.74
University of Alberta	82,257.16
University of British Columbia	5,638.99
University of Manitoba	11,226.95
McGill University	17,761.06
Montreal General Hospital	7,582.37
University of Montreal	25,000.00
University of Saskatchewan	23,185.26
University of Toronto	75,078.42
University of Western Ontario	<u>32,456.92</u>
	<u>\$283,833.87</u>

Note: Some of the grants were made for specific projects - others were made to Fitness Research Units.

TABLE 30

GRANTS UNDER THE FITNESS AND AMATEUR SPORT ACT TO SPORTS GOVERNING BODIES,  
BY TYPE OF PROGRAM,  
FOR THE FISCAL YEARS 1964-65 and 1965-66

Organization	National Championships 1964-65   1965-66		International Meets 1964-65   1965-66		Training Programs 1964-65   1965-66		Special Programs or Events 1964-65   1965-66		Adminis- tration 1965-66		TOTALS 1964-65   1965-66	
SPORTS GOVERNING BODIES - CO-ORDINATING MULTIPLE SPORTS												
Canadian Olympic Association	-	-	-	-	-	-	-	8,500	-	30,000	8,500	30,000
Sub-Total	-	-	-	-	-	-	-	8,500	-	30,000	8,500	30,000
SPORTS GOVERNING BODIES												
Amateur Athletic Union of Canada	-	-	-	-	-	-	-	-	-	11,787	-	11,787
- Boxing	5,846	5,381	-	-	-	-	-	-	-	-	5,846	5,381
- Fencing	2,541	3,339	300	1,100	-	2,500	-	-	-	-	2,841	6,939
- Gymnastics	4,746	3,672	-	2,932	-	2,000	-	-	-	-	4,746	8,604
- Handball	2,156	-	550	-	2,500	-	-	-	-	-	5,206	-
- Track and Field	20,315	27,884	-	722	3,700	-	4,000	4,500	-	-	28,015	33,106
- Weightlifting	1,393	3,805	-	6,665	2,500	4,379	-	-	-	-	3,893	14,489
- Wrestling	4,572	9,688	-	2,478	5,770	5,766	-	-	-	-	10,342	17,932
Canadian Amateur Basketball Association	24,470	31,740	-	12,434	-	6,624	-	-	1,566	-	24,470	52,364
Canadian Amateur Bobsleigh Association	-	-	9,000	5,944	-	-	-	-	638	-	9,000	6,582
Canadian Amateur Hockey Association	-	-	38,870	48,950	50,000	3,500	-	-	-	-	88,870	52,450
Canadian Amateur Ski Association	18,730	17,250	4,950	43,784	28,990	19,612	-	-	1,894	-	52,670	82,540
Canadian Amateur Softball Association	8,015	-	-	-	-	6,000	-	-	-	-	8,015	6,000
Canadian Amateur Speedskating Association	1,500	2,500	600	-	3,000	4,342	-	-	1,248	-	5,100	8,090
Canadian Amateur Swimming Association	-	-	-	-	-	-	-	-	1,993	-	-	1,993
- Swimming	13,420	16,500	-	16,840	11,575	10,000	-	-	-	-	24,995	43,340
- Diving	1,788	-	-	-	4,922	5,232	-	-	-	-	6,710	5,232
- Synchronized	3,182	2,916	1,182	2,436	3,000	3,600	-	-	-	-	7,364	8,952
- Water Polo	3,564	3,240	-	2,145	550	1,110	-	-	-	-	4,114	6,495
Canadian Archery Association	-	-	-	5,198	-	1,972	-	-	915	-	-	8,085
Canadian Association of Amateur Oarsmen	6,810	5,764	-	9,000	2,360	2,536	-	-	1,158	-	9,170	18,458
Canadian Badminton Association	2,300	3,950	2,400	-	1,000	2,425	2,000	2,000	1,309	-	7,700	9,684
Canadian Canoe Association	1,825	1,940	-	1,050	285	1,710	-	-	-	-	2,110	4,700
Canadian Cricket Association	4,536	-	-	764	1,286	2,621	-	-	880	-	5,822	4,265
Canadian Field Hockey Association	2,230	2,730	-	2,820	2,200	-	-	-	1,078	-	4,430	6,628
Canadian Figure Skating Association	7,024	7,363	5,000	7,213	-	22,891	-	-	2,032	-	12,024	39,499
Canadian Intercollegiate Athletic Union	27,000	15,500	-	-	-	-	-	-	1,510	-	27,000	17,656



Station	Time	Lat	Long	Depth	Temp	Wind	Wave	Cloud	Remarks
1	0800	34° 15' N	122° 00' W	1000	10.0	10	10	10	Clear
2	0900	34° 30' N	121° 45' W	1000	10.5	10	10	10	Clear
3	1000	34° 45' N	121° 30' W	1000	11.0	10	10	10	Clear
4	1100	35° 00' N	121° 15' W	1000	11.5	10	10	10	Clear
5	1200	35° 15' N	121° 00' W	1000	12.0	10	10	10	Clear
6	1300	35° 30' N	120° 45' W	1000	12.5	10	10	10	Clear
7	1400	35° 45' N	120° 30' W	1000	13.0	10	10	10	Clear
8	1500	36° 00' N	120° 15' W	1000	13.5	10	10	10	Clear
9	1600	36° 15' N	120° 00' W	1000	14.0	10	10	10	Clear
10	1700	36° 30' N	119° 45' W	1000	14.5	10	10	10	Clear
11	1800	36° 45' N	119° 30' W	1000	15.0	10	10	10	Clear
12	1900	37° 00' N	119° 15' W	1000	15.5	10	10	10	Clear
13	2000	37° 15' N	119° 00' W	1000	16.0	10	10	10	Clear
14	2100	37° 30' N	118° 45' W	1000	16.5	10	10	10	Clear
15	2200	37° 45' N	118° 30' W	1000	17.0	10	10	10	Clear
16	2300	38° 00' N	118° 15' W	1000	17.5	10	10	10	Clear
17	0000	38° 15' N	118° 00' W	1000	18.0	10	10	10	Clear
18	0100	38° 30' N	117° 45' W	1000	18.5	10	10	10	Clear
19	0200	38° 45' N	117° 30' W	1000	19.0	10	10	10	Clear
20	0300	39° 00' N	117° 15' W	1000	19.5	10	10	10	Clear
21	0400	39° 15' N	117° 00' W	1000	20.0	10	10	10	Clear
22	0500	39° 30' N	116° 45' W	1000	20.5	10	10	10	Clear
23	0600	39° 45' N	116° 30' W	1000	21.0	10	10	10	Clear
24	0700	39° 50' N	116° 20' W	1000	21.5	10	10	10	Clear
25	0800	40° 00' N	116° 10' W	1000	22.0	10	10	10	Clear
26	0900	40° 10' N	116° 00' W	1000	22.5	10	10	10	Clear
27	1000	40° 20' N	115° 50' W	1000	23.0	10	10	10	Clear
28	1100	40° 30' N	115° 40' W	1000	23.5	10	10	10	Clear
29	1200	40° 40' N	115° 30' W	1000	24.0	10	10	10	Clear
30	1300	40° 50' N	115° 20' W	1000	24.5	10	10	10	Clear
31	1400	41° 00' N	115° 10' W	1000	25.0	10	10	10	Clear
32	1500	41° 10' N	115° 00' W	1000	25.5	10	10	10	Clear
33	1600	41° 20' N	114° 50' W	1000	26.0	10	10	10	Clear
34	1700	41° 30' N	114° 40' W	1000	26.5	10	10	10	Clear
35	1800	41° 40' N	114° 30' W	1000	27.0	10	10	10	Clear
36	1900	41° 50' N	114° 20' W	1000	27.5	10	10	10	Clear
37	2000	42° 00' N	114° 10' W	1000	28.0	10	10	10	Clear
38	2100	42° 10' N	114° 00' W	1000	28.5	10	10	10	Clear
39	2200	42° 20' N	113° 50' W	1000	29.0	10	10	10	Clear
40	2300	42° 30' N	113° 40' W	1000	29.5	10	10	10	Clear
41	0000	42° 40' N	113° 30' W	1000	30.0	10	10	10	Clear
42	0100	42° 50' N	113° 20' W	1000	30.5	10	10	10	Clear
43	0200	43° 00' N	113° 10' W	1000	31.0	10	10	10	Clear
44	0300	43° 10' N	113° 00' W	1000	31.5	10	10	10	Clear
45	0400	43° 20' N	112° 50' W	1000	32.0	10	10	10	Clear
46	0500	43° 30' N	112° 40' W	1000	32.5	10	10	10	Clear
47	0600	43° 40' N	112° 30' W	1000	33.0	10	10	10	Clear
48	0700	43° 50' N	112° 20' W	1000	33.5	10	10	10	Clear
49	0800	44° 00' N	112° 10' W	1000	34.0	10	10	10	Clear
50	0900	44° 10' N	112° 00' W	1000	34.5	10	10	10	Clear
51	1000	44° 20' N	111° 50' W	1000	35.0	10	10	10	Clear
52	1100	44° 30' N	111° 40' W	1000	35.5	10	10	10	Clear
53	1200	44° 40' N	111° 30' W	1000	36.0	10	10	10	Clear
54	1300	44° 50' N	111° 20' W	1000	36.5	10	10	10	Clear
55	1400	45° 00' N	111° 10' W	1000	37.0	10	10	10	Clear
56	1500	45° 10' N	111° 00' W	1000	37.5	10	10	10	Clear
57	1600	45° 20' N	110° 50' W	1000	38.0	10	10	10	Clear
58	1700	45° 30' N	110° 40' W	1000	38.5	10	10	10	Clear
59	1800	45° 40' N	110° 30' W	1000	39.0	10	10	10	Clear
60	1900	45° 50' N	110° 20' W	1000	39.5	10	10	10	Clear
61	2000	46° 00' N	110° 10' W	1000	40.0	10	10	10	Clear
62	2100	46° 10' N	110° 00' W	1000	40.5	10	10	10	Clear
63	2200	46° 20' N	109° 50' W	1000	41.0	10	10	10	Clear
64	2300	46° 30' N	109° 40' W	1000	41.5	10	10	10	Clear
65	0000	46° 40' N	109° 30' W	1000	42.0	10	10	10	Clear
66	0100	46° 50' N	109° 20' W	1000	42.5	10	10	10	Clear
67	0200	47° 00' N	109° 10' W	1000	43.0	10	10	10	Clear
68	0300	47° 10' N	109° 00' W	1000	43.5	10	10	10	Clear
69	0400	47° 20' N	108° 50' W	1000	44.0	10	10	10	Clear
70	0500	47° 30' N	108° 40' W	1000	44.5	10	10	10	Clear
71	0600	47° 40' N	108° 30' W	1000	45.0	10	10	10	Clear
72	0700	47° 50' N	108° 20' W	1000	45.5	10	10	10	Clear
73	0800	48° 00' N	108° 10' W	1000	46.0	10	10	10	Clear
74	0900	48° 10' N	108° 00' W	1000	46.5	10	10	10	Clear
75	1000	48° 20' N	107° 50' W	1000	47.0	10	10	10	Clear
76	1100	48° 30' N	107° 40' W	1000	47.5	10	10	10	Clear
77	1200	48° 40' N	107° 30' W	1000	48.0	10	10	10	Clear
78	1300	48° 50' N	107° 20' W	1000	48.5	10	10	10	Clear
79	1400	49° 00' N	107° 10' W	1000	49.0	10	10	10	Clear
80	1500	49° 10' N	107° 00' W	1000	49.5	10	10	10	Clear
81	1600	49° 20' N	106° 50' W	1000	50.0	10	10	10	Clear
82	1700	49° 30' N	106° 40' W	1000	50.5	10	10	10	Clear
83	1800	49° 40' N	106° 30' W	1000	51.0	10	10	10	Clear
84	1900	49° 50' N	106° 20' W	1000	51.5	10	10	10	Clear
85	2000	50° 00' N	106° 10' W	1000	52.0	10	10	10	Clear
86	2100	50° 10' N	106° 00' W	1000	52.5	10	10	10	Clear
87	2200	50° 20' N	105° 50' W	1000	53.0	10	10	10	Clear
88	2300	50° 30' N	105° 40' W	1000	53.5	10	10	10	Clear
89	0000	50° 40' N	105° 30' W	1000	54.0	10	10	10	Clear
90	0100	50° 50' N	105° 20' W	1000	54.5	10	10	10	Clear
91	0200	51° 00' N	105° 10' W	1000	55.0	10	10	10	Clear
92	0300	51° 10' N	105° 00' W	1000	55.5	10	10	10	Clear
93	0400	51° 20' N	104° 50' W	1000	56.0	10	10	10	Clear
94	0500	51° 30' N	104° 40' W	1000	56.5	10	10	10	Clear
95	0600	51° 40' N	104° 30' W	1000	57.0	10	10	10	Clear
96	0700	51° 50' N	104° 20' W	1000	57.5	10	10	10	Clear
97	0800	52° 00' N	104° 10' W	1000	58.0	10	10	10	Clear
98	0900	52° 10' N	104° 00' W	1000	58.5	10	10	10	Clear
99	1000	52° 20' N	103° 50' W	1000	59.0	10	10	10	Clear
100	1100	52° 30' N	103° 40' W	1000	59.5	10	10	10	Clear

Remarks: Clear sky, light breeze, calm sea. All instruments working properly. No significant changes in weather or sea conditions observed during the run.



Receipt, sorting and distribution of mail is one of the major functions of the Departmental Secretary's Division.



## ADMINISTRATION BRANCH DEPARTMENTAL SECRETARY

During the year under review the Division continued to provide a range of essential administrative services to the Department and toward the end of the year disappeared as an organizational entity in a major reorganization of the Administration Branch along lines recommended by the Department's Management Project.

Services provided by the Departmental Secretary's office included (a) assistance to the Minister and the Deputy Ministers in the preparation and approval of the Departmental Estimates; (b) the provision of financial advice to the Department; (c) approval, on behalf of the Deputy Minister, of various financial actions; (d) administration of Departmental security activities; (e) organization of all financial campaigns within the Department; (f) processing Parliamentary Returns and other documents for tabling in the House of Commons; (g) acting as an information center for the entire Department.

Services provided by the Sections comprising the Departmental Secretary's Division were as follows:

The Financial Services Section provided accounting advisory services for Directorates and Divisions (other than Medical Services Directorate) and carried out much of the detail involved in the preparation of the Departmental Estimates.

The Parliamentary Papers and Correspondence Section continued to prepare extracts and distribute and index items of interest from parliamentary papers, to prepare material for tabling in Parliament, to act as a source of supply for legislative documents, to reply to many thousands of public enquiries, and to arrange for the certification of public institutions under Section 47 of the Excise Tax Act.

Registry Services, Secretarial Services and Addressograph Services Sections continued to provide essential services to the Department on an increasing scale.

Departmental communications were improved markedly by the establishment of a Telex Message Center operated by the Secretarial Services Section.

## INFORMATION SERVICES

The work of Information Services, which involves all forms of communications between the Department and the public, continued to expand in 1965-66.

### The Word from the Presses

A large number of new publications and posters were produced on a wide variety of subjects. They included:

Two "How-To" kits on the subjects of lacrosse and skiing for the Fitness and Amateur Sport Directorate.

A bright, large poster titled "Figure Right With Canada's Food Guide" and a revised folder "Make Every Day Vitamin-D Day" for the Nutrition Division.

A bilingual booklet sent to every home in Canada explaining the Canada Pension Plan.

A bilingual pamphlet explaining to the general public the extension of the Old Age Security program.

Two manuals - "Registration and Inquiry" and "Emergency Feeding" - for the Emergency Welfare Services Division.

A series of posters for the Food and Drug Directorate designed to emphasize care in the use of drugs by the public. These were titled: "Read Your Label", "Don't Waste Your Money", "Drugs and Driving", "Drugs and Alcohol Don't Mix" and "Self-Treatment May Be Dangerous".

A book titled "Mental Retardation in Canada", which is a verbatim account of the October, 1964 Federal-Provincial Conference on Mental Retardation held in Canada. This was printed in a limited edition meant for professionals in the mental health field.

A pamphlet "Breast Feeding Your Baby" was begun for the Child and Maternal Health Division. It was scheduled to be printed early in the 1966-67 fiscal year.

#### The Convention Floor

Fresh ideas and original design were featured in the construction of several displays shown at national and international conventions. These displays included:

"Drugs and You" produced for the Food and Drug Directorate. The subject is drug abuse; the message is "handle with care".

Two displays for the Smoking and Health Program titled "For Better Health" and "The Dark Brown Taste That Lasts".

A display titled "National Health in Canada" on the general subject of available health consultation services.

An Emergency Welfare Services display which outlines the responsibilities of that division.

An exhibit "Some Measures in Social Welfare", designed to outline the various Canadian welfare programs.

Two Fitness displays, "Fitness for Canadians" and an Information Services-Fitness display.



## The Cine Story

Films and filmstrips loom considerably larger in the work of the Division. These are the highlights of the 1965-66 fiscal year:

"VD? See Your Doctor" - a film telling of the dangers of venereal disease and what steps to take if it is contracted.

"Clear Gain" - a filmstrip concerning vocational preparation for the mentally retarded prepared for the Mental Health Division.

"The Drag" - an animation film on the dangers of cigarette smoking - is being screened commercially and was shown at the Cannes Film Festival. Also for the Smoking and Health Program, a film of the Canadian Youth Conference on Smoking and Health.

Television clips for the same program are in process of production and clips with a fitness theme were being prepared.

A film on water sports prepared for the Fitness and Amateur Sport Directorate is expected to be released for public viewing early in the current (1966-67) fiscal year.

A film on child safety for the Child and Maternal Health Division, titled "Growing Up Safely".

"The Gap", a film describing the different areas of social work. The film is intended to increase interest in this field and aid in the recruiting of young people into social work.

## Mass Media

Now in its 17th consecutive year, "Your Health, Your Welfare", recorded in English or French, was heard on a total of 123 Canadian radio stations.

As in previous years, many departmental officers on various levels took part in radio and television programs, as interviewees and members of panels or seminars. On such occasions members of Information Services acted as liaison officers between the participating officers and the radio or television stations.

## Photographic Unit

The Biological Photographic Laboratory was reorganized and is now part of the Photographic Unit. The Unit consists of three areas: the Photographic Laboratory, Theatre (audio-visual) and the Library.

The Photographic Laboratory is divided in two sections, scientific and informational. Gross specimen photography, photomicrography, photomacrography and electron photomicroscopy processing are conducted in the scientific section. Informational photography is concerned with press type photos, publicity portraiture and precision copy work.

The new Theatre, which was completed this spring, can accommodate 72 people and services the 36 divisions and directorates of the department. All films purchased for the departmental film library are viewed in the Theatre for evaluation by the divisions concerned. Magnetic tape recording and film editing is also conducted in the Theatre.

The Film Library maintains a program of procuring films for evaluation by both health and welfare officers. The following table provides statistics in this area:

TABLE 33

National Film Libraries

	Total No. Films as of		Withdrawals (1965-66)	Additions (1965-66)	Circulation*	
	March 31/65	March 31/66			(1964-65)	(1965-66)
Health	514	518	6	10	3,136	3,595
Medical and Biological	307	306	1	-	1,360	1,454
Welfare	37	35	2	-	137	131

\* Indicates the number of bookings only.

A start was made on the revamping and setting up of a new Photo Library. It is intended to service the departmental needs with illustrative material for press releases, television, publications, displays and lecture slides, as well as supplying other government departments and agencies requiring health and welfare photographs. The photographic illustrations are in black and white, colour transparencies, and 35 mm. slides.

#### Special Project

Approximately 2,000 photographic situations pertaining to health and welfare were supplied to Expo 67 in both black and white and colour.

#### Public Relations

It has been an exceptionally heavy year for the Division in terms of relations with the Canadian public. The flow of inbound queries and outbound answers has kept officers occupied for a relatively large number of hours each working week. But, in a more specific area, the arrangements for a number of national conferences involved Division staff in production of leaflets, programs and assorted literature, as well as in problems of physical accommodation.

Major conferences were: Federal-Provincial Conference of Welfare Ministers; Federal-Provincial Conference of Deputy Ministers of Welfare; National Council of Welfare; Canadian Youth Conference on Smoking and Health; Federal-Provincial Conference on Nutrition; Federal-Provincial Conference of Ministers of Health.



## LEGAL

The Legal Division is essentially a service division to the Department. As such, it serves the Minister and the Deputy Heads of the Department, including all of the Directorates, Divisions and Sub-Divisions.

It also provides legal services in connection with any administrative matters where there are possible legal implications.

Arising out of the foregoing, the Legal Division has been concerned with the preparation of regulations, contracts, opinions, and other legal documents of all kinds. It is responsible for the preliminary development and preparation of legislation of immediate concern to the Department and its initial implementation.

The Division advises on liability respecting claims against the Department within the provisions of the current Orders in Council. During the past year the Division has been particularly active in connection with matters relating to the development of the Canada Assistance Plan and the implementation of the Canada Pension Plan. The latter has involved preparation of agreements, regulations and other matters required for the administration of that Act.

The Division acts as adviser in connection with prosecutions arising out of the enforcement of certain of the Acts which are within Department administration, including the Food and Drugs Act, Family Allowances Act, Old Age Security Act and the Narcotic Control Act.

The Legal Division, moreover, acts in a special capacity in providing advice through the Deputy Ministers to the Department of the Secretary of State respecting the incorporation of companies under the Canada Corporations Act that involve aspects of health or welfare.

## DEPARTMENTAL LIBRARY

The Departmental Library continued with the selection, acquisition and organization of reference and technical books, serials, pamphlets and government documents related to the Department's interests. The number of serial subscriptions was considerably increased and included new types of bibliographic services.

Special projects such as advisory services to planning groups in Canada, the study of co-operative library services in Scandinavian countries, the analysis of requests, the selection of research serial titles in the health sciences for the National Library, and so on, were for the most part associated with the interests and activities of the Health Communications Committee.

## PERSONNEL ADMINISTRATION AND ORGANIZATION

### Organizational Changes

During this period a number of reports were issued by the Management Studies Project. Following these, several organizational changes have been made. The organization of 1966 as of March 31, 1966, is described in a chart in the appendix.

A Director General of Administration was appointed and the central administration divisions were reorganized under his direction. The divisions formerly under the Departmental Secretary were reorganized. A new three-jarred of Financial Administration and a Management Services Division were created. The Directorate of Personnel Administration was strengthened by the appointment of a Chief Classification Officer. Plans have also been developed for a Material Management Division and a Departmental Audit Unit. All these measures are designed to enable the Department to meet its organizational responsibilities in conformity with the decentralized concepts recommended by the Glassco Commission and now approved by the Government.

The Canada Pension Plan Directorate was created within the General Secretariat.



Spacious and well-lighted, the Departmental Library is the central location for most of the department's reference material.



The Department of the Interior, Bureau of Land Management, is pleased to announce the availability of the following information:

1. A list of the names of the persons who have been granted patents for the discovery of gold in the State of California.

2. A list of the names of the persons who have been granted patents for the discovery of silver in the State of California.

3. A list of the names of the persons who have been granted patents for the discovery of copper in the State of California.

4. A list of the names of the persons who have been granted patents for the discovery of iron in the State of California.

5. A list of the names of the persons who have been granted patents for the discovery of lead in the State of California.

6. A list of the names of the persons who have been granted patents for the discovery of zinc in the State of California.

7. A list of the names of the persons who have been granted patents for the discovery of tin in the State of California.

8. A list of the names of the persons who have been granted patents for the discovery of mercury in the State of California.

9. A list of the names of the persons who have been granted patents for the discovery of platinum in the State of California.

10. A list of the names of the persons who have been granted patents for the discovery of nickel in the State of California.

11. A list of the names of the persons who have been granted patents for the discovery of cobalt in the State of California.

## PERSONNEL ADMINISTRATION AND ORGANIZATION

### Organizational Changes

During this period a number of reports were issued by the Management Studies Project. Following these, several organization changes have been made. The organization as it was on March 31, 1966, is described on a chart in the appendix.

A Director General of Administration was appointed and the central administration divisions were reorganized under his direction. The divisions formerly under the Departmental Secretary were regrouped. A new Directorate of Financial Administration and a Management Services Division were created. The Directorate of Personnel Administration was strengthened by the appointment of a Chief Classification Officer. Plans have been developed for a Materiel Management Division and a Departmental Audit Unit. All these measures are designed to enable the Department to meet its management responsibilities in conformity with the decentralized concepts recommended by the Glassco Commission and now approved by the Government.

The Canada Pension Plan Directorate was created within the Income Security Branch.

In order to carry out the Department's responsibilities with respect to the new Health Resources Fund, to conduct planning with respect to Medical Care Insurance and co-ordinate these activities with related ongoing programs, the divisions which had been in the Health Services Directorate were regrouped into two Branches, one retaining the name Health Services Branch and the other being called the Health Insurance and Resources Branch.

Of course, within many of the Branches and Divisions of the Department there have been many organizational changes. Those which have important significance are described in the report of their respective divisions.

### Establishment Changes

As the result of changing programs, a number of positions were deleted and others added for a net increase during the year of 593.

### Classification and Salary Studies

During this period, all positions in the Administrative Support Category were rated in accordance with the new Standards authorized by the Bureau of Classification Revision of the Civil Service Commission. Also, progress was made on the Administrative Category.

The introduction of a new classification standard for the Research Scientist Group and the reclassification of research staff took place during this period. This new method of classifying researchers is an innovation of great significance and has won general acceptance both with management and staff.



TABLE 34

ESTABLISHED FULL-TIME POSITIONS MARCH 31, 1965 AND MARCH 31, 1966

WELFARE							HEALTH					ADMINISTRATION										TOTAL		
	Canada Pension Plan	Family Allowances & Youth Allowances	Old Age Security	Welfare Assistance and Services	Emergency Welfare Services	Fitness and Amateur Sport	Others	Medical Services	Health Services	Health Insurance and Resources	Food and Drug	Others	Financial Administration	Information Services	Legal Division.	Library	Office and Secretarial Services	Personnel Administration	Management Services	Registry Services	Research and Statistics	Others		
March 31 1965		788	39	24	11			3,216			612	533			35	6	17		51	3	65	201	*	5,601
March 31 1966	37	918	71	24	15	14		3,182	733	57	718	8			43	7	19	39	61	3	102	77	54	6,194

\* This figure includes 142 positions for Departmental Secretary's Division which was recently reorganized into Financial Administration, Office and Secretarial Services and Registry Services.

TABLE 35  
GEOGRAPHICAL DISTRIBUTION OF POSITIONS  
AS AT MARCH 31, 1966

	Ottawa	Mont.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Y. T.	N. W. T.	O/S	Total
Departmental Administration	424														424
Health Services	459			8	5	14	108	16	6	11	27				459
Prosthetic Services - Field Offices	12			4	3	7	1	4	1		6				207
Public Health Eng. - District Offices	42			12	8	21	109	20	7	15	33				72
	513														738
Health Insurance & Resources	57														57
Food and Drug	346	3	1	24	5	87	113	28	2	7	43				346
Headquarters															33
Regions: Eastern															87
Central															113
West Central															30
Narcotic Control															50
	42			1	1	4	5	1	1	1	3				59
	388	3	1	25	6	91	118	29	3	8	46				718
Medical Services	260			35	5	73	198	322	269	806	582	80	93	3	263
(See Note 1 and 2)	208	7					83								564
Headquarters															413
Regions: Eastern															269
Central															979
Saskatchewan															582
Foothills															112
Pacific															112
European															3,182
	468	7		35	5	73	281	322	269	806	582	80	139	115	5
Income Security	5														918
Headquarters															37
Family Allowances, Youth Allowances															960
and Old Age Security - Provinces															20
Canada Pension Plan															51
	12	25	10	43	35	208	335	52	51	64	83				71
	37														20
	54	25	10	43	35	208	335	52	51	64	83				24
Welfare Assistance	20														44
and Services	28	1		2	2	5	5	2	2	2	2				
	48	1		2	2	5	5	2	2	2	2				
Special Programs	20														
Headquarters															
Emergency Welf. Serv. - Reg'l Offices															
	39			1		1	1			1	1				
	1,991	36	11	118	56	399	849	425	332	896	747	80	139	115	6,194
GRAND TOTAL															

NOTE 1: Headquarters includes 102 medical specialist and medical officer pooled positions which service various locations in Canada.  
NOTE 2: Nursing positions are pooled at the regional offices located at:  
- Ottawa (Eastern)  
- Alberta (Foothills)  
- Manitoba (Central)  
- British Columbia (Pacific)  
- Saskatchewan (Saskatchewan)







Hon. Allan J. MacEachen, Minister of National Health and Welfare, welcomes to the department a group of Junior Executive Officers, most of whom will serve in administrative capacities.



## Appointments

There were 1,671 appointments and 1,372 terminations during the year.

There were 743 promotions (including reclassifications) during the year.

## Staff Training

Seventy-one members of the staff received further education in professional and technical subjects at extra-departmental institutions.

Twenty-four members of the staff attended administrative and management courses offered by the Civil Service Commission.

One hundred and two staff members followed courses in French and six followed courses in English.

The Department's Staff Training and Development Division conducted a number of courses to meet particular needs.

## PURCHASING AND SUPPLY

The Purchasing and Supply Division continued to carry out its responsibility for procurement of materiel and services for all branches of the Department in Canada and Overseas. The volume of work was comparable to that of recent years.

The Division dealt with approximately 16,000 requisitions for materiel and services, 17,000 invoices, and 1,700 entries requiring Customs clearance. Requisitions pertained to the widest possible range of commodities necessitating purchasing in world markets.

Other activities of the Division included procurement of printing services and repair services for office equipment, and accommodation administration.

## RESEARCH AND STATISTICS

In the second half of the year the Directorate was completely re-organized in order better to cope with the increasing demands for services facing its various units. Four new divisions were created, each headed by a Principal Research Officer as chief of division; these are the Health Research Division, the Welfare Research Division, the Social Security Research Division, and the Biostatistics Division. The annual reports of each of these Divisions follow these introductory remarks.

From April 8 to May 8 the Director and three other senior departmental officers visited each provincial capital to discuss with provincial



health officials the recommendations of the Royal Commission on Health Services on medical care insurance and health resources. Further visits were made in August-September to discuss cost estimates with officials of five provinces. The Director organized and chaired the first meeting of a federal-provincial committee on welfare statistics, with emphasis on Canada Assistance Plan administrative statistics, convened in Ottawa on February 10 and 11 at the request of the Deputy Ministers of Welfare. The Director also chaired the August 1965 meeting of the Canada Pension Plan Statistics Committee, a committee of officers from various departments, which reviewed proposals for annual tabulations of data on contributions and earnings arising from the Canada Pension Plan. In June the Director was appointed to serve as a member of the Advisory Committee on HIB Statistics to the United States Health Insurance Bureau, and attended four meetings of this group in Washington during the year. He also served as a member of the Interdepartmental Committee on Unemployment Insurance set up in August to advise the Minister of Labour on possible improvements in the plan, and as a member of the Interdepartmental Co-ordinating Committee on Socio-Economic Statistics and its Sub-Committee on Linkage Techniques.

In December the Director participated in the Conference on Poverty and Opportunity, held in Ottawa, and in January in the Conference on Aging, held in Toronto, at which he chaired the sessions on research. In September he attended the Regional Conference of the American Public Welfare Association, held in Victoria, B. C., where he presented a paper on "Social Policy and the War on Poverty", published in the April 1966 issue of "Public Welfare". In June he gave an address in San Francisco on the Canada Pension Plan to the delegates of the Tenth Convention of the Office Employees International Union. Also at various times during the year he lectured on medical economics, research methodology, and social security, to students at the Universities of Toronto and Ottawa, and at the senior administrative officers course in Carleton Place.

The staff of the Directorate was considerably strengthened during the year by the appointment of a special Consultant in Aging to serve in the Welfare Research Division, as well as several other research officers in health, welfare, and social security. It was weakened, however, by the retirement of the Consultant in the Planning and Evaluation of Welfare Research, after 22 years of outstanding service in Research and Statistics, and by the departure, after 21 years, of the Principal Research Officer, Social Security, to join the Canada Pension Plan staff.

## HEALTH RESEARCH

The Health Research Division conducts studies in the economic, social and organizational aspects of health care, with special emphasis on underlying principles, costs, methods of financing, social effectiveness and administrative methods. Plans were developed during the year for the re-organization of the work of the Division into four major functional areas: medical care, hospital care, public health and special projects.



Much of the research program during the year was a follow-up of the Report of the Royal Commission on Health Services, and was related to federal proposals for financial assistance to provincially administered medical insurance plans, and for sharing the health care costs of public assistance recipients with the provinces as part of the forthcoming Canada Assistance Plan.

The Director of Research and Statistics was one of a group of senior officials who visited all ten provinces early in the year to review provincial health needs and requirements in the light of the recommendations of the Royal Commission, and the Director and the Principal Research Officer (Health) participated in the preparation of the Departmental Appraisal of these recommendations.

Various studies, including cost estimates, were undertaken to assist in the development of policy proposals. At the Federal-Provincial Conference in July 1965 a report entitled "Preliminary Estimates of Program Costs of Physicians' Services Under a Comprehensive Medical Care Program, Canada and the Provinces, 1964 to 1971" was submitted for consideration. This was followed by trips by Division staff to a number of provinces to review program cost estimates, based on the Prime Minister's four point medicare proposal, and by the development of memoranda on estimated 1967 costs of physicians' services in the ten provinces. In response to specific requests, the staff assisted a few provinces in developing their own cost estimate material. Efforts were made to keep abreast of program developments in the provinces and in foreign countries and different aspects of the federal medicare proposal were explored in depth.

Research continued on public and voluntary medical care insurance in Canada. A document entitled "Persons Covered under Medical Care Insurance Programs in Canada and Provinces, 1964" was prepared and distributed to provincial health authorities. A survey of voluntary health insurance carriers was undertaken, and a bulletin on "Voluntary Medical Insurance in Canada 1960-64" was nearing completion at the end of the year. Other projects included a Research Division Memorandum on "Public Medical Care Programs in Newfoundland", a chart of benefits of selected voluntary medical insurance plans; a study on social security institutions and the medical profession for the International Social Security Association; and articles on "Physicians' Services in Australia", "Health Insurance for the Aged in the United States" and "Medical Assistance Plans in the United States" for the monthly publication, "Canada's Health and Welfare". A Research Division Memorandum on "Government Sponsored Voluntary Medical Insurance Programs" was in preparation at the end of the year.

Work was done also on the cost implications of the proposal to share health care costs of public assistance recipients, and trips were made to several provinces to study existing programs. Six Research Division memoranda were published on "Financing of Personal Health Care for Public Assistance Recipients" in Nova Scotia, Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia. At the end of the year a comprehensive report on health care programs for public assistance recipients was nearing completion.



Among other areas of continuing interest and study were the analysis of the supply of physicians, development of doctors' fee schedule indices, studies of trends in the average earnings of physicians, and plans for the development of medical care utilization and cost statistics.

### Hospital Care

The Hospital Care Section continued to supply research services to the Health Insurance and Resources Branch. Estimated per capita costs of in-patient services in Canada were prepared as the basis for determining federal advances to the provinces under the hospital insurance program during 1965. The main factors accounting for the increases in hospital operating costs in the last few years were explained in a special memorandum prepared for the use of Treasury Board.

A report on 1963 hospitalization experience covering utilization and bed accommodation, selected data on patient characteristics, hospital personnel and hospital expenditures, was prepared as part of the Annual Report of the Minister of National Health and Welfare under the Hospital Insurance and Diagnostic Services Act for the fiscal year ended March 31, 1965.

Work was begun on an historical review of hospital cost trends with a view to analysis in depth of the factors involved. "The Cost of Hospital Insurance in Canada" was the title of an article submitted for inclusion in Canada's Health and Welfare. Assistance was given to the Health Facilities Design Division in a review of hospital construction cost statistics, study of construction cost indices, and a report on the relationship of hospital meal days and the size of hospital dietary departments.

Plans were initiated for a complete review of annual hospital statistical reporting forms in collaboration with the Dominion Bureau of Statistics, and provincial hospital insurance agencies.

### Public Health and Rehabilitation

Work continued on the two-volume publication "Canada's Health Programs", which will contain a comprehensive review and description of federal, provincial, local and voluntary health services. At the end of the year, chapters on each province had been completed and approved by provincial health authorities, and were being prepared for publication.

At the request of the Dominion Bureau of Statistics an article on "The Development of Health Services in Canada" was prepared for inclusion in a volume to be issued to celebrate Canada's Centennial in 1967.

The Section continued to maintain up-to-date references on rehabilitation services, and to supply information and consultation on request. Material on rehabilitation and chronic disease services in Canada was supplied for inclusion in a number of different publications. Plans were made for a survey of prosthetic services in Canada. A report on rehabilitation in social security institutions was submitted to the International Social Security Association. A survey of costs of respiratory disability, under workmen's



compensation programs, was undertaken. Considerable research was done on health services for aged persons, and a staff member attended the Canadian Conference on Aging.

As in previous years, continuing activities included the annual revision of the material on health services, rehabilitation and voluntary agencies for the Canada Year Book, and the Canada Handbook, maintenance and transmittal of health legislation and regulations to the World Health Organization, and compilation of information on various health services and organizations in response to inquiries from different sources.

### Special Projects

The Director of Research and Statistics served during the year on the advisory committee on research and statistics to the Health Insurance Bureau of the United States Social Security Administration. The function of the committee was to develop research proposals in connection with the newly enacted program of health insurance for the aged in the United States.

The Principal Research Officer (Health) attended the National Conference on Poverty and Opportunity in December 1965. As its contribution the Division submitted a special paper on "Health and Employability", which was later edited for publication in the "Canadian Medical Services Journal".

The Principal Research Officer (Health) represented the Directorate on the Interdepartmental Committee on Drugs formed to study the recommendations of the Restrictive Trade Practices Commission and certain recommendations of the Royal Commission on Health Services. The study prepared in the Division entitled "Provision, Distribution and Cost of Drugs in Canada" was published by the Royal Commission on Health Services.

An increasing area of activity has been in connection with the proposed Health Resources Fund. Section staff participated in the preliminary work of the Health Resources Fund working party concerned with reporting forms and procedures. Experience in the United States was reviewed. An article on "Financing Health Training Facilities and Research Facilities in the United States" was prepared for publication in "Canada's Health and Welfare".

Staff from all sections assisted in special projects such as the "Canada Year Book" and "Canada Handbook", co-ordinated through the Special Projects Section. The annual report "Health and Welfare Services in Canada" was produced.

Other special projects included a questionnaire survey of socio-economic research projects in the health field, up-dating of data on national health expenditures, and a study of health care price indices in Canada and the United States.

### WELFARE RESEARCH

#### Public Assistance and Family Services

Publications. During 1965-66 a number of memoranda, bulletins and articles were prepared in the Public Assistance and Family Services Section.



Three memoranda were completed: "Statistical Information on Canadian Schools of Social Work as of November 1, 1964, and the Academic Year 1963-64"; a similar memorandum for the academic year 1964-65; and "Federal Legislation Related to Social Welfare, 1908-1965, Selected Statutes". A reference paper entitled "Public Assistance Programs in Canada, a Brief Analysis", was prepared for the Conference on Poverty and Opportunity, held in December, 1965. The English and French editions of the bulletin, "Changes in Child Welfare Legislation in Canada, 1962 and 1963", and the French edition of "Changes in Legislation in General Assistance, Mothers' Allowances and Living Accommodation for the Elderly in Canada, 1962 and 1963" were completed and distributed. An article, "Changes in Legislation in General Assistance, Mothers' Allowances and Living Accommodation for the Elderly, 1964", was prepared for the "Labour Gazette". Articles were also prepared for the "Human Rights Yearbook" on welfare legislation during 1964; for "Canada's Health and Welfare" on "The National Conference on Day Care"; and several articles on social welfare were reviewed and brought up to date, including material for the "Canada Year Book".

Technical, consultative services. The Section also provided technical and consultative services to officers within the Department and in other government departments. The Section reviewed and assessed all applications for welfare research grants, a member served on the Research Advisory Committee, and the Section provided other consultative services on research projects as required. Special memoranda on various aspects of child welfare and general assistance were prepared for departmental use.

Committees. Staff members of the Section served on a number of committees including the National Committee on Visiting Homemakers of the Canadian Welfare Council, and interdepartmental Film Committee, and the editorial committee of "Bien-être social canadien" published by the Canadian Welfare Council.

Members of the Section attended the National Conference on Social Welfare, held in Atlantic City, May, 1965, and the American Public Association, Biennial Conference, Chicago, December, 1965.

A large volume of correspondence from individuals, and public and voluntary welfare agencies and organizations in Canada and abroad on a variety of aspects of child welfare, general assistance, services for special groups, the administration of the social services and related matters was dealt with.

#### Welfare Manpower

During the year the methodology for a nation-wide survey of welfare workers and welfare positions was developed and the plan for analyzing the data to be collected was completed. A series of questionnaires were devised and these were pre-tested with selected agencies. It was intended that the actual survey would be carried out in the fall of 1965; most arrangements had been made, although the participation of certain agencies had not been worked out. However, the whole project had to be postponed when the research officer engaged for this purpose left the Department to take up a research position with the Canadian Welfare Council. It will be revived



when the Directorate can secure a suitable research person to carry the project to its conclusion.

### Aging

The special concerns of the aged and aging received the constant attention of the Division throughout the year, and were highlighted by the first Canadian Conference on Aging. The Consultant on Aging prepared a number of basic documents for the Conference, including a "Fact Sheet on Canada's Population" 65 years of age and over, a background paper on "Leisure", and a conference luncheon address on "Usual and Imaginative Services". She participates in the follow-up of the Conference as a member of the Canadian Welfare Council's Committee on Aging. She prepared for departmental use and for wider distribution a series of documents, summarizing and evaluating the "Final Report of the Special Committee of the Senate on Aging". Departmental services included the preparation of materials for the National Council of Welfare, writing a Global Report on The Canadian Conference on Aging for "Canada's Health and Welfare", and liaison with the Health branch on common concerns in the field of aging.

The Consultant's services also were sought by a number of private agencies, in such areas as pre-retirement preparation, retirement counseling, nursing home care, institutional building plans. She visited the States of New York, Minnesota and Iowa, to study programs of special interest affecting the care and involvement of older people.

The Consultant attended a number of meetings, including a Conference on the Teaching of Gerontology, Toronto; National Council on Aging, Washington; Institute on Nursing Home Care, Toronto; Workshop on "Nursing and the Health of our Aged", London, Ontario.

### Federal-Provincial Welfare Statistics

The Division collaborated with other directorate officers in developing a system of welfare statistics which would provide a national core and be comparable from province to province. A Directorate Committee, chaired by the Principal Research Officer (Welfare), assumed the federal side of this responsibility as its main project for the year. The Acting Supervisor of the Public Assistance and Family Services Section, a member of the Committee, collaborated with the Principal Research Officer (Biostatistics) in drafting statistical report forms. Preliminary work was also begun on a review of national child welfare statistics. The first federal-provincial meeting on welfare statistics, chaired by the Director, met in Ottawa in February for two days. It discussed, among other things, the categories of statistics that might be developed for common use, basic terms and definitions, the manner and frequency of reporting statistics between levels of government. A number of draft tables covering the kinds of data to be collected were examined. Revised tables were prepared for consideration at a second meeting to be held later in 1966.

### Organization and Staffing

During the year the Division was reorganized to provide for five sections as follows: Public Assistance and Family Services, Economics



of Welfare, Community Development, Aging, and Special Projects. A Consultant on Aging joined the permanent staff in July and subsequently other staff members were appointed to posts in the areas of corrections and special projects. At the close of the year the Division was reviewing applications for several positions as a result of a recent competition.

#### International

Canada has been one of twelve countries selected by the United Nations to undertake a study of the organization and administration of the social services in their respective areas. The Division has undertaken to carry out this study on behalf of the Department.

The Division has also in hand the completion of a United Nations questionnaire on new developments in family, youth and child welfare and in planning, organization and administration of social services during the last two years.

The Division collaborated with the International Welfare Division of the Department in providing information on welfare services in Canada to a number of foreign visitors under the auspices of the United Nations or of the External Aid Office.

#### SOCIAL SECURITY RESEARCH

Following passage of the Canada Pension Plan early in the year the Division assisted in many of the activities required to get the program under way. Research was continued or undertaken on other matters such as family allowances, private pension plans, public welfare statistics, and international aspects of social security programs. Two new staff members were added to work on research with respect to the Canada Pension Plan and another member was added to work in the private pension plan field. During the year an interdepartmental committee was established to develop a revised unemployment insurance program. A member of the Division was made available on loan for five months to the interdepartmental research group which worked intensively on this project.

Members of the Division took an active part in the preparation of basic memoranda on contribution statistics and on benefit statistics for the Canada Pension Plan. Discussions on statistical problems of mutual interest were held with a representative of the RRQ. The chief of the Division played a large part in the preparation of the draft booklet on the Canada Pension Plan which was placed in every household. He also assisted in the preparation of material for the publicity campaign for the Canada Pension Plan. The Division prepared draft regulations on the pension index and the earnings index. The chief of the Division spent three days in New York City with officials of the Canada Pension Plan reviewing the activities and functions of a regional office, a district office and the payment centre. The Division prepared the draft report on the Canada Pension Plan for the fiscal year 1964-65 and took part in the discussion on the agreements with Quebec for the exchange of information between the Canada Pension Plan and the Quebec Pension Plan and for the coverage by the Quebec plan of the federal civil servants.



Members of the Division took part in the development of the draft of the Canada Assistance Bill. Background papers were prepared for the federal-provincial conference on Poverty and Opportunity, including the publication "Income Maintenance Measures in Canada". The chief of the Division was a member of the committee which developed material on public welfare statistics and attended the federal-provincial conference of officials on that topic.

In the area of private pension plans, members of the Division discussed with officials of the Dominion Bureau of Statistics the questionnaire and instructions for the 1965 survey of private pension plans and attended the Canadian Pension Conference meeting on the integration of private pension plans with the Canada Pension Plan. The chief of the Division attended the interprovincial conference in Quebec City on the uniformity of pension plan legislation.

The proposal of the Senate Committee on Aging for a guaranteed annual income for older people was reviewed by the Division and memoranda on it were prepared for senior officials. The family allowances program was a subject of discussion during the year and an analysis of the program and of various proposals for its change or improvement was prepared.

The question of international reciprocal social security agreements was under active discussion during the year and members of the division attended a number of meetings on this topic. The Division prepared basic memoranda on the possible ratification by Canada of the International Labor Organization Convention 102 on Minimum Standards for Social Security and on ILO Convention 118 on the Equality of Treatment of Nationals and Non-nationals under social security programs. The ILO asked its member governments to prepare a reply to a questionnaire, to be discussed at a meeting in Germany in the spring of 1966, on the revision of its earlier Conventions 35 to 40 relating to old age, survivors and disability insurance. The reply to this questionnaire was prepared in the Division.

At the request of the Department of Labour, a lengthy reply was prepared to the questionnaire of the International Labour Office on the cost of social security in Canada for the years 1961-63. Also prepared was a reply to a questionnaire of the International Social Security Association on the relation between old age and invalidity pensions.

Two members of the Division attended two introductory courses on computers. The Canadian Pension Conference meetings on problems of retirement and on the administration of the Canada Pension Plan, the first two meetings of the National Council of Welfare and the Canadian Conference on Aging were attended by members of the Division. The Division was represented at the American Public Welfare Association Conference for the Northeastern United States.

A Global Report was prepared on the amendments made in 1965 to the old age, survivors and disability insurance program in the U.S. An article on the Canada Pension Plan was drafted for use by the Deputy Minister of Welfare as was material for a lecture by the Deputy Minister of Welfare to senior civil servants on administrative problems in social security. The



draft of an article on the Canada Pension Plan prepared by officials of the Department of Health, Education, and Welfare of the U.S. was submitted to the Division for review.

## BIOSTATISTICS

### Reorganization of Biostatistics into a Division

During the year approval was obtained with the Department to reorganize the Research and Statistics Division into a directorate with each of the sections being converted to a divisional status. This required extensive consideration of reorganization of the establishment of the Biostatistics Unit.

New job descriptions were written for the positions to be set up within the Division and the existing complement of staff was reviewed in the light of the new reorganization of the Division. Consideration was also given to the organization of the clerical services and use of data processing and computer services.

### Development of Computer Data Processing and Information Retrieval Methods

Considerable attention was given to the problem of the use of computers within the Department of National Health and Welfare. Based on the projection of the requirements of the Department over the next five years as presented earlier to the Departmental Management Project, special study was made of the computer techniques and resources which would be required. The immediate problem of computer resources was solved by the introduction of the Central Data Processing Services (C. D. P. S. ) by the Federal Government; through this service computer time was available to the Department on all available installations on a contract basis through the C. D. P. S.

The Biostatistics Division took advantage of the opportunity to study computer methodology as offered by the Central Data Processing Services. Lectures were given to the staff of the Division by representatives of C. D. P. S. Several statisticians took the Introductory Courses to Computer Theory and to Fortran and Cobol Machine Language. One senior statistician and two clerks took a course in Assembly Language Programming as well offered by the I. B. M. All courses were arranged by the Central Data Processing Services.

Practical applications of computer techniques were considered for some of the statistical programs within the Biostatistics Division and consideration was also given to selected research projects. A start was made however, on a program for hospital morbidity data using the Fortran language.

In the field of computers, consideration was given also to problems of data linkage. This question arose specifically in connection with the use of Canada Pension Plan Statistics for linkage with other socio-economic data by other departments of the Government. Consideration was also given to data linkage for other purposes. A discussion was held with Dr. Howard Newcombe of Atomic Energy at Chalk River. Dr. Newcombe has prepared



a number of linkage studies using Vital Statistics records. A meeting was also attended under the auspices of the Bank of Canada and the Economic Council of Canada to consider program sharing and data sharing in the Government Services. A questionnaire in this connection was completed by the Directorate. It was agreed in principle that there should be free exchange of programs and data within the limits of security but that a central storage facility for such material did not appear to be practical.

In the data processing operations of the Biostatistics Division a new technique was introduced by the installation, during the year, of a Remington Rand Optical Scan Punch. A number of coding projects were transferred to the new optical scan procedure. This procedure eliminated the need for spread sheets and for usual time spent in punching since the optical scan punch automatically punches marked cards at a hundred and fifty cards per minute. Several continuing projects were converted to the new technique and several new projects were also adopted to the optical scan technique.

Consideration was also given to information retrieval procedures during the year. Prior review of methods made at a Public Records demonstration had indicated the possible use of microfilm methods for information retrieval, and of the Kodak "MIRACODE SYSTEM" in particular. The application of the Epidemiology Division for use of this system in their technical information services was reviewed and evaluated. A demonstration of Miracode was also attended by various statisticians within the Division. Through the application for the use of Termatrix made by the Documentation Centre for Physical Fitness, consideration was given to the limitations and usefulness of the Termatrix information retrieval system.

## Epidemiology

During the year the final report on the "Canadian Study of Smoking and Health" was completed in draft, providing an evaluation of the effects of smoking, residence and occupation on health for the male and female respondents in the survey. A research memo concerning trends and causes of death for diseases of interest in relation to smoking was also prepared, covering the period 1950-1964. Chronic bronchitis cases obtained from the Department of Veterans Affairs treatment records were matched with the smoking questionnaire and a statistical analysis was undertaken of these data and a preliminary draft report was prepared. Evaluation was provided for a paper prepared by Dr. Ernest Wynder concerning lung cancer among non-smokers which made use of some data from the Canadian Smoking and Health Study. A meeting was held with Mr. William Paige of the Tobacco Research Foundation, Great Britain, to review the findings of the Smoking and Health Study. Assistance was also given to Dr. Pett in developing the statistical analysis of data from a Study of Smoking Habits carried out by "Canadian Facts".

Continuing attention was given to the problem of tuberculosis and allied diseases. Officers from the Division attended the Third National Tuberculosis Conference as observers. Assistance was also given to the Epidemiology Division in the design of a study of Atypical Mycobacterial Infections. Assistance was also given in the conduct of a field study of Sarcoidosis.



The study of accidents continued to be a matter of major concern. The Principal Research Officer served as a member of a sub-committee of the Traffic Injury Research Foundation (T. I. R. F. ) to develop priorities for research in traffic injuries. Progress was made in developing a research memo concerning trends in traffic accidents in Canada.

Consideration was given to a proposed study of venereal diseases treated by physicians. A proposed questionnaire study of the "Use of Tetanus Antiserum" in hospitals was also reviewed. A review was also made of recent epidemics of influenza in Canada to determine if a mathematical model developed in the United States could be applied to Canadian data to predict epidemics of this disease.

#### Food and Drug

In collaboration with the Epidemiology Division assistance was further extended to the Laboratory Services of the Department to develop program statistics and research studies. During the year, work was advanced in evaluating the Poison Control Program. The 1963 statistical report was completed and work was well advanced on coding the 1964 statistics. During the year, the reporting forms were also extensively revised and for 1966 a reporting form was developed based on the use of optical scan punch cards. Services were extended to the provinces by preparing provincial reports for Ontario and British Columbia, and a number of special tabulations were prepared for research studies of particular types of poisonous substances. Discussions were held with Food and Drug regarding statistics of drug distribution and adverse drug reactions.

#### Laboratory Services

With the Laboratory of Hygiene, work was continued on the evaluation of the returns of the Survey of Normal Haemoglobin Values. Assistance was also given in the consideration of the application of computer techniques to autoanalyzer laboratory tests. Assistance was given in developing a sample for field tick surveys to be undertaken in the summer. A new application of mechanical data processing was undertaken in connection with processing statistics for the Salmonella Report Program. Monthly statistical reports were prepared in draft concerning human and non-human salmonella cases isolated by Canadian laboratories. An optical scan punch card reporting system was also developed for use during the year 1966. A special nine-month report on Salmonella statistics was prepared for presentation to the Advisory Committee on Epidemiology and the Annual Report for 1965 was also completed.

For the Virus Laboratory, a new statistical reporting system of Virus Isolations was developed during the year. Statistical data for 1964 were prepared. Amendments to the reporting and statistical procedures were undertaken for 1965 as a consequence. Statistics were then prepared for the first half of 1965. An Annual Report covering the full year was also provided.

Assistance was also given to the Virus Laboratory in the development of an analysis of variance in the Study of Antiserum Neutralization of wild and attenuated virus strains.



Assistance was also given to the laboratory staff of the Ottawa Civic Hospital. A demonstration, analysis and methodology was set up for evaluation of different techniques for testing prothrombin time. Assistance was also given in the evaluation of results of experiments to test colour discriminations among colour-blind people.

#### Radiation Protection Services

The Senior Statistician from the Division attached to the Radiation Protection Division continued to provide statistical consultation and direction to the work of the Division. The coding and analysis of the Milk Consumption Survey was completed during the year and material was prepared for papers presented by the Chief of the Radiation Protection Division and a final statistical report of the study was prepared for his use. Work was initiated on the analysis of the Film Monitoring records for the period 1961-1963. Editing and coding of the records was largely completed by the end of the year. Consideration was also given to the development of the statistical analysis of the data from the Film Monitoring Program for 1964 and 1965. Some work was also undertaken to develop the statistical results of the survey of Radioisotope Services. A small nutrition study was developed and carried out in conjunction with a test of the total body monitoring equipment of the Radiation Protection Division.

Consultation services were provided to a number of different professional workers within the Radiation Protection Division. Consideration was given to a sampling of radioactivity in water supplies. Several papers prepared by the professional staff of the Division were reviewed from the statistical point of view. Preliminary analysis was undertaken of a Survey of Thyroid Weights and direction was provided on the collection of the data. The sampling procedure involved in the bone sampling program was also reviewed and revised. A paper covering the statistical aspects of the Film Monitoring Program was prepared for "Canada's Health and Welfare".

A reorganization was undertaken of the Data Processing Services within the Radiation Protection Division. The Senior Statistician was put in charge of the technicians and other staff in the Data Processing Unit. Use was made of the Univac Electronic Computer to develop the analysis from the Milk Survey. Use was also made of the Univac to carry out statistical analysis and repunching of the data from the Haemoglobin Survey.

#### Health Insurance and Resources

As usual the Division undertook the responsibility for editing the "Annual Return of Hospitals" making use of summer students. The statistical report required for the Minister's Annual Report for the year 1964 was also prepared. A preliminary statistical report was also prepared during the year and distributed to the Advisory Committee on Hospital Insurance in November 1965. At this same meeting, a document "Trends in Hospital Morbidity 1961-1963" was also presented. Effective liaison with the Dominion Bureau of Statistics and with the Provincial Hospital Administrations Services was maintained, and with the Hospital Services Study Unit. Useful meetings and discussions were held with the Provinces of Quebec and Ontario concerning reporting procedures.



Three summer students were each assigned projects for special study concerning the special departments of hospitals as reported in the "Annual Return of Hospitals". One of these studies was developed into a full scale research memorandum and a full report concerning the use of automation in the hospital laundry was prepared by the Division. Data were also assembled and reviewed in a preliminary manner for the radiology and surgical services of the large hospitals in Canada.

It became apparent in the course of the year that the provinces were experiencing increasing difficulty in maintaining the format already established for the "Annual Return of Hospitals". As a result, it was proposed to the Hospital Insurance Division that a revision of the annual return should be undertaken. Meetings were held with the Hospital Insurance Division and the Dominion Bureau of Statistics, and arrangements were made to canvass the provinces for their suggestions for changes to be made in the "Annual Return of Hospitals" and plans were laid for a Revision Conference to be held in the fall.

The consolidation of provincial hospital morbidity statistics was further advanced during the year. In addition to the data prepared for the Minister's Annual Report, a full statistical report was prepared and distributed covering national morbidity data for the year 1963, covering the ten standard tables approved by the Advisory Committee on Hospital Insurance.

Processing of the admission-separation forms was carried out for the year 1964 for both the Territorial Hospital Insurance Services and for the Yukon Hospital Insurance Services. The ten standard tables approved by the Advisory Committee on Hospital Insurance were prepared in the form of a statistical report for each of these hospital plans.

Nursing Functions Studies were carried out in several hospitals during the year. The statistical analysis of the Saint John General Hospital in New Brunswick was completed and a report was made to the hospital by the Nursing Consultant in Health Insurance. Similar studies were carried out in five small hospitals of Prince Edward Island and reports were made to the Hospital Insurance Commission for each of these hospitals. Statistical samples were drawn up for the St. John's General Hospital in Newfoundland and for the Moncton City Hospital in New Brunswick. A sample was also designed for the Blanchard-Fraser Memorial Hospital in Nova Scotia but this proposed study was dropped. Plans were laid for a Nursing Functions Study at the Prince Albert Hospital in Saskatchewan as well. A review article on the "Methodology of Nursing Functions Studies" was prepared for Canada's Health and Welfare and was published during the year.

#### Occupational Health Division

Statistical analysis of the health - growth questionnaire data and the employment history data for the fluorspar miners in St. Lawrence, Newfoundland was carried forward. Consideration was also given at the request of the Occupational Health Division for the development of a set of survey report forms for use in a Community Sickness Survey to be carried out in certain areas of Newfoundland and in Yellowknife, N.W.T. Optical Scan records were devised for use in the Sickness Survey and in the Survey of Physicians' Services. Consultation was maintained with the Central Data Processing Services.



The Principal Research Officer of Biostatistics was asked to serve on a National Steering Committee to study the Biological Effects of Asbestos. He served both on the sub-committee on Epidemiology and the sub-committee concerning Environmental Measurements. At the request of the Steering Committee, a screening study was undertaken of the morbidity and mortality data for selected communities in Quebec. A report was prepared for the Steering Committee.

Assistance was given to the Nursing Consultant in the Industrial Hygiene Division of the Ontario Department of Public Health in the design of a study of Occupational Health Nurses. Several meetings were held and the forms and survey design procedures were developed and plans were made for the Biostatistics Division to handle the returns from the study.

#### Dental Health

At the request of the Dental Health Division an analysis was undertaken of health examination data carried out prior to fluoridation of the school children in the town of Paris, Ontario. The analysis was undertaken to determine the deviations from normal standards of health as observed in the child population. Assistance was given in further designing the study to permit a follow-up comparison after the introduction of fluorides and for the inclusion of a control community in the study.

In consultation with the Dental Health Research Consultant a study was designed to measure the demand for dental services in a population which maintains regular dental care services.

#### Mental Health

Three members of the Biostatistics Division attended the meeting of the Sub-committee on Statistics of the Advisory Committee on Mental Health. Assistance was also given to the Mental Health Division in reviewing various research projects. During the year a paper covering Mental Retardation Research was also prepared for "Canada's Health and Welfare". Members of the Division attended the National Mental Retardation Conference.

#### Child and Maternal Health

The Principal Research Officer attended meetings of the Expert Committee on Congenital Anomalies. Assistance was given to the Division in planning the statistical analysis of congenital anomalies as reported on the birth certificates.

Statistics were provided concerning the diseases of childhood and adolescence. Cost estimates were provided of requirements for child care in hospitals in Canada. Assistance was given to the Ontario Crippled Children's Society regarding the development of a Crippled Children's Register for the Province of Ontario.

#### Medical Services

During the year assistance was given in the development of a Study of Pilots Involved in Aircraft Accidents in Canada. The study was designed in



its basic framework and meetings were held with several sections of the Department of Transport including the Medical Licensing Statistics, the Aircraft Accidents Statistics, and the Aircraft Registration Statistics Units.

Concerning a paper on noise-induced deafness among R.C.A.F. personnel, assistance was given by helping to assess its value for publication and by suggesting improvements which could be made to the paper.

#### University of Ottawa - Department of Preventive Medicine

The Principal Research Officer and two senior statisticians of the Biostatistics Division assisted the Department of Preventive Medicine by rotating as statistical consultants once a month, September to May, at seminars in which fourth year medical students appraised and discussed medical research papers. Further statistical consultations were given to staff members of the Department of Preventive Medicine concerning research projects which they were planning.

#### International Health

Assistance was provided to the Principal Medical Officer by providing statistics for the "World Health Situation Report". A commentary on the Canadian Requirements for Health Statistics was also completed at the request of the Principal Medical Officer, International Health.

#### Social Security

The Principal Research Officer of Biostatistics was involved in the development of the statistics for the Canada Pension Plan. Meetings were attended with the Comptroller of the Treasury, National Revenue and other agencies involved to develop basic proposals for statistics required concerning the contributors to the Canada Pension Plan. As a result, a report was prepared containing basic proposals for such statistics. The proposals were reviewed by the Sub-Committee on Statistics for the Canada Pension Plan.

At the request of the International Social Security Association, a questionnaire was completed concerning the use of data processing and computer facilities in the Canadian Social Security Programs.

#### Welfare Statistics

The Principal Research Officer of Biostatistics was an active member of the Welfare Statistics Committee. Particular attention was paid to the interests of the Canada Assistance Plan in the development of such statistics.

A visit was made to the Province of Nova Scotia regarding their statistical reporting requirements under the Canada Assistance Plan. Assistance was also provided to the Province of Alberta in the revision of their statistical reporting under the Public Assistance and Child Welfare Programs.

With the senior officer for welfare programs, an evaluation was made of all the application forms covering public assistance and other welfare



programs by the various provinces to determine a common denominator of reportable items and uniform concepts. From this study, a basic set of definitions was evolved and eventually a proposed set of analytical tables for welfare reporting was developed. These proposals were reviewed in a seminar within the Research Directorate and were also made the subject matter of the first Dominion-Provincial conference on welfare statistics, held in February.

For the Poverty Conference held in December 1965, material was drafted concerning the health aspects of poverty and an attempt was made also to establish basic health indices which might relate to and evaluate poverty. Assistance was given to the Consultant in Aging in the development of a Fact Sheet on Aging, including particular socio-economic and health aspects of the subject.

#### Welfare Grants Research

Considerable time was taken in evaluation of several particular applications for Welfare Research Grants. Meetings were also held to evaluate and assist in the design of particular Welfare research projects.

"The 1965 Report of the Statistics of Homes for Special Care" was prepared and distributed for use by both the Health and Welfare Branches of the Department during the year.

#### Physical Fitness

At the request of the Physical Fitness Division, a research statistician was designated as consultant to this Division. The statistical analysis was made of a Survey of Sports Activities carried out across Canada. Assistance was also given to the Legal Division in demonstrating that a physical growth chart prepared by the Department had been produced independently of and did not depend on the Wetzel Grid. Assistance was also given in statistically allocating the Fitness Grant funds by province.

#### Personnel Statistics

For the Canadian Public Health Association, a statistical report of Nursing Functions carried out by Public Health Nurses in six public units of Ontario was completed. Assistance was given in the development of the design of a Survey of Welfare Positions in Canada. Questionnaires and directives were developed. Data concerning laboratory workers in Canada was provided for reference purposes to Parke Davis Company. The "Canadian Medical Directory" new computer records for physicians were reviewed in detail in committee with the "Canadian Medical Directory" representatives. An evaluation was carried out of the report on medical education as prepared by the Royal Commission on Health Services. A representative of the Man-power Department reviews our health and welfare personnel studies.



## DIRECTORY OF DEPARTMENTAL OFFICERS

### MINISTER

Honourable Allan J. MacEachen

Parliamentary Secretary: Mrs. Margaret Rideout  
Special Assistant: W.M. MacEachern, B.A. (Journalism)  
Special Assistant: M. McInnis  
Private Secretary: Mrs. P. Hunter

### Deputy Minister of National Health and Welfare (Health)

John N. Crawford, M.D.

### Deputy Minister of National Health and Welfare (Welfare)

J.W. Willard, M.A., M.P.A., A.M., Ph.D.

### FOOD AND DRUG BRANCH

Director General: R.A. Chapman, B.S.A., M.Sc., Ph.D.  
Deputy Director General: L.I. Pugsley, B.A., M.Sc., Ph.D.  
Assistant Director General, Drugs: M.G. Allmark, B.A., M.A.  
Assistant Director General, Foods: D.G. Chapman, B.S.A., M.Sc., Ph.D.  
Chief, Administrative Services: A.B. Tennenhouse, B.S.A., M.Sc.  
Director, Bureau of Operations: A. Hollett, B.Sc., M.Sc.  
Chief, Field Programs Division: K.M. Render, B.Sc.  
Chief, Advertising, Labelling and Registration Division: P. Soucy, B. Pharm.  
Director, Bureau of Scientific Advisory Services: A.C. Hardman, M.D.,  
D.P.H.  
Chief, Medical Division: J. Bishop, M.B., B.S., M.R.C.S., L.R.C.P.  
A/Chief, Pharmacological Evaluation Division: W.A. Mannell, B.Sc., Ph.D.  
A/Chief, Standards and Additives Division: A.B. Swackhamer, B.S.A.  
Chief, Veterinary Medicine Division: W.T. Oliver, D.V.M., M.Sc., Ph.D.  
Chief, Consumer Division: Miss E.M. Ordway  
Chief, Narcotics and Controlled Drugs Division: R.C. Hammond, Phm.B.  
Director, Research Laboratories: J.A. Campbell, B.Sc., M.Sc., Ph.D.  
Chief, Food Division: W.P. McKinley, B.Sc., M.Sc., Ph.D.  
Chief, Microbiology Division: F.S. Thatcher, B.Sc., M.Sc., Ph.D.  
Chief, Nutrition Division: T.K. Murray, B.Sc., M.Sc., Ph.D.  
Chief, Pharmaceutical Chemistry Division:  
L. Levi, B.Sc., B.Sc.(Pharm.), Ph.D., F.C.I.C.  
Chief, Pharmacology and Endocrinology Division:  
A.B. Morrison, B.Sc., M.Sc., Ph.D., M.S.



## Regional Directors

Eastern Region (Halifax): L.B. McIsaac, B.Sc.  
East Central Region (Montreal): P.E. Jean, M.Sc.  
Central Region (Toronto): J.B. Jones, B.Sc.  
West Central Region (Winnipeg): B.A. Gray, B.S.A.  
Western Region (Vancouver): E.L. Devlin, B.S.A. (Honors)

## MEDICAL SERVICES BRANCH

Director General: H.A. Procter, D.S.O., Ph.D., M.D.  
Adviser, Civil Service Health,  
Civil Aviation Medicine: E.L. Davey, M.S., D.P.H.  
Adviser, Immigration Medical Service: R.W. Wood, M.D.  
Adviser, Quarantine and Sick Mariners Service: R.W. Robertson, M.D.  
Medical Liaison Officer: G. Graham-Cummings, M.B., Ch.B., D.P.A.,  
D.T.M.  
Medical Staff Officer: J.E. Gompf, M.D., D.P.H.  
Senior Medical Adviser,  
Indian and Northern Health: W.H. Frost, M.D., C.M., D.P.H.

## Regional Directors

Eastern Region (Ottawa): J.H. Wiebe, B.A., M.D., D.P.H.  
Central Region (Winnipeg): O.J. Rath, M.D.  
Saskatchewan Region (Regina): T.J. Orford, M.D., C.M.  
Alberta Region (Edmonton): M. Matas, M.D.  
Northern Region (Edmonton): G.C. Butler, M.B., B.Ch., D.P.H.  
Pacific Region (Vancouver): R.D. Thompson, M.D., D.P.H.  
European Region (London, Eng.): J.E. Grant, M.D., C.M.

## HEALTH SERVICES BRANCH

Director General: E.A. Watkinson, M.D., C.M., D.P.H.  
Deputy Director General: L.B. Pett, B.S.A., M.A., Ph.D.,  
M.D., D.P.H.

## SPECIAL HEALTH SERVICES

Aerospace Medicine, Consultant:  
W.A. Prowse, C.D., M.D., C.M., D.P.H., D.I.H.  
Child and Maternal Health, Chief:  
Jean F. Webb, B.Sc., M.D., C.M., D.P.H.  
Dental Health, Chief: R.A. Connor, D.D.S., D.D.P.H., F.I.C.D.  
Epidemiology Division, Chief: E.W.R. Best, M.D., D.P.H.  
Health Education, Consultant: M.E. Palko, B.A., M.P.H.  
Laboratory of Hygiene, Director: E.T. Bynoe, B.S.A., M.Sc.,  
Ph.D.

Medical Rehabilitation Division, Chief: O. Hoffman, M.D.  
 Occupational Health Division, Chief:  
     T.H. Patterson, M.D., C.M., D.P.H., L.M.C.C., M.P.H.  
 Prosthetic Services, Medical Consultant:  
     L. Kawula, M.D., M.P.H., S.A.C.O.G., S.A.P.H.A.  
 Public Health Engineering Division, Chief:  
     W.R. Edmonds, B.A.Sc., M.A.Sc., B.P.Eng.  
 Radiation Protection Division, Chief: P.M. Bird, B.Sc., M.Sc.,  
     Ph.D.  
 Research Development, Consultant:  
     R.W. Tooley, C.D., M.A., L.M.S.S.A., M.R.C.S.,  
     L.R.C.P., D.P.H.  
 Special Programs, Chief: G.H. Josie, B.Sc., M.Sc., M.P.H.,  
     Sc.D.

## HEALTH INSURANCE AND RESOURCES BRANCH

Director General: E.H. Lossing, M.D., C.M., M.P.H.

### HEALTH FACILITIES DESIGN

Director: G.W. Peck, C.D., B.Arch., M.Sc., M.R.A.I.C.

### HEALTH GRANTS

Principal Medical Officer: G.E. Wride, M.D., D.P.P.

### HEALTH RESOURCES

Director: W.S. Hacon, M.B., B.S., D.H.A.

### HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES

Director: R.B. Goyette, B.A., P.C.N., M.D., D.P.H.

### MEDICAL CARE INSURANCE

Director: R.A. Armstrong, M.D., L.M.C.C.

### HOSPITAL SERVICES STUDY UNIT

Director: G.B. Rosenfeld, B.A.



## INCOME SECURITY BRANCH

Director General: J.A. Blais

### CANADA PENSION PLAN

Director: G.L. Pickering, B.A., B.S.(Accounting)

### FAMILY ALLOWANCES, YOUTH ALLOWANCES AND OLD AGE SECURITY

Director: R.H. Parkinson, B.A., M.S.W.  
Assistant Director: W.F. Hendershot, B.A.

#### Regional Directors

Newfoundland, St. John's: L. Abbott  
Prince Edward Island, Charlottetown: J.E. Green, B.Sc., M.S.W.  
Nova Scotia, Halifax: J.E. McKay  
New Brunswick, Fredericton: A. Nicholson  
Quebec, Quebec: J.A.M. Caron  
Ontario, Toronto: J.G. Parsons, B.Sc.(Educ.), M.Sc.  
Manitoba, Winnipeg: W.A. Wright, B.A., B.S.W.  
Saskatchewan, Regina: R.J.G. Mitchell, B.A., B.S.W., M.S.W.  
Alberta, Edmonton: W.W. Dahl  
British Columbia, Victoria: W.H. Davis, D.P.A.

## WELFARE ASSISTANCE AND SERVICES BRANCH

Director General: R.B. Splane, M.A., D.S.W.

### CANADA ASSISTANCE PLAN

Director: N.F. Cragg, M.S.W.

### WELFARE GRANTS

Director: W.W. Struthers, B.A., B.S.W.

## SPECIAL PROGRAMS BRANCH

Director General: J.A. Macdonald, B.A.

### EMERGENCY WELFARE

Director: P.H. Stehelin, L.L.B.

### FITNESS AND AMATEUR SPORT

Director: R. Dion B.A., M.A.

### INTERNATIONAL WELFARE

Director: B.J. Iverson, B.A., B.S.W., M.S.W.

## ADMINISTRATION BRANCH

Director General: W.B. Brittain D.F.C., B.Sc.

### FINANCIAL ADMINISTRATION

Director: D.R. Aitchison, A.C.W.A.

### LIBRARY

Departmental Librarian: Miss M.J. Morton, B.H.Sc., B.L.S.

### MANAGEMENT SERVICES

Chief: G.H. Aubut, B.Com.

### MATERIEL SERVICES

Chief: I.C. Ellis, Ph.C.

### OFFICE AND SECRETARIAL SERVICES

Chief: F.E. Goudge

### PERSONNEL ADMINISTRATION

Director: J.B. Hartley, B.A., M.Sc.

### REGISTRY SERVICES

Chief: G.E. Logan



## TRANSLATION

Chief: G. A. Sauve

## TREASURY

Chief: H. L. Rock

## CENTRAL SERVICE DIVISIONS

### INFORMATION SERVICES

Director: Harvey W. Adams

### LEGAL DIVISION

General Counsel: R. E. Curran, Q.C., B.A., L.L.B.

### RESEARCH AND STATISTICS

Director: J. E. E. Osborne, M.A., D.H.A.

# DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS

## ADMINISTRATIVE OFFICES

### OTTAWA

Brooke Claxton Building, Tunney's Pasture

#### Canada Assistance Plan Offices

ST. JOHN'S, Nfld. ....	Dept. Public Welfare, Confederation Bldg.
HALIFAX, N.S. ....	Dept. Public Welfare, P.O. Box 696
FREDERICTON, N.B. ....	Dept. Youth and Welfare, P.O. Box 910
QUEBEC, P.Q. ....	Quebec Social Allowance Commission, Parliament Buildings
TORONTO, Ont. ....	Dept. Public Welfare, Parliament Bldgs., Queens Park
WINNIPEG, Man. ....	Dept. of Welfare, 113 Norquay Bldg., Kennedy and York
REGINA, Sask. ....	Dept. of Welfare, 2240 Albert Street
EDMONTON, Alta. ....	Dept. Public Welfare, Administration Bldg.
VICTORIA, B.C. ....	Dept. of Social Welfare, R. 340, Parliament Bldgs.

#### Canada Pension Plan Offices

ST. JOHN'S, Nfld. ....	Building 102, Pleasantville
CORNER BROOK, Nfld. ....	Federal Building, Fishers Hill
CHARLOTTETOWN, P.E.I. ....	Box 1238, Dominion Building
HALIFAX, N.S. ....	Room 328, Ralston Building 105 Hollis Street
ANTIGONISH, N.S. ....	Metropolitan Building, Main Street
SYDNEY, N.S. ....	Federal Building, Dorchester and Charlotte Street
MONCTON, N.B. ....	Suite 107, 1111 Main Street, P.O. Box 785
SAINT JOHN, N.B. ....	P.O. Box 626
FREDERICTON, N.B. ....	P.O. Box 175
EDMUNDSTON, N.B. ....	36 Court Street
TORONTO, Ont. ....	25 St. Clair Avenue East
HAMILTON, Ont. ....	4th Floor, 110 Main Street, West
LONDON, Ont. ....	Room 401, 4th Floor, Toronto Dominion Bank Bldg., 365 Richmond Street
SAULT STE. MARIE, Ont. ....	Room 209, New Dominion Building
TIMMINS, Ont. ....	67 Pine Street



KINGSTON, Ont. ....	Federal Building
SUDBURY, Ont. ....	Federal Building, Lisgar Street
OTTAWA, Ont. ....	255 Argyle Avenue
WINDSOR, Ont. ....	Unemployment Insurance Commission Bldg., 441 University Avenue, West
PORT ARTHUR, Ont. ....	Federal Building
KITCHENER, Ont. ....	220 King Street, East
WINNIPEG, Man. ....	MacDonald Building, 344 Edmonton Street
BRANDON, Man. ....	Room 225, Federal Building, Princess Avenue
REGINA, Sask. ....	1975 Scarth Street
SASKATOON, Sask. ....	608 Financial Building, 230-22nd Street, East
EDMONTON, Alta. ....	Room 474, Federal Building
LETHBRIDGE, Alta. ....	Room 317, Federal Building
CALGARY, Alta. ....	Room 707, Public Building
VANCOUVER, B.C. ....	Room 210A, 1231 Haro Street
VICTORIA, B.C. ....	P.O. Box 1177
PENTICTON, B.C. ....	Federal Building, 283 Winnipeg Street
WHITEHORSE, Y.T. ....	Federal Building

#### Emergency Welfare District Offices

VICTORIA, B.C. ....	Room 241, 816 Government Street
EDMONTON, Alta. ....	Room 301, Federal Building, 107th Street and 98th Avenue
QUEBEC, P.Q. ....	Room 10, 3 Buade St., P.O. Box 940
HALIFAX, N.S. ....	Room 510, Sir John Thompson Bldg.

#### Family Allowances, Youth Allowances and Old Age Security

ST. JOHN'S, Nfld. ....	Building 102, P.O. Box 607, Pleasantville
CHARLOTTETOWN, P.E.I. ....	Confederation Bldg., P.O. Box 1238
HALIFAX, N.S. ....	Ralston Building, Hollis Street
FREDERICTON, N.B. ....	New Federal Building
QUEBEC, P.Q. ....	Postal Terminal Building, Henderson Street, P.O. Box 1816
TORONTO, Ont. ....	25 St. Clair Avenue, East
WINNIPEG, Man. ....	Ellice Building, 344 Edmonton Street
REGINA, Sask. ....	Scarth Street and Victoria Avenue
EDMONTON, Alta. ....	Federal Building, 107th Street
VICTORIA, B.C. ....	Federal Building, P.O. Box 220

### Food and Drug Laboratories

OTTAWA, Ont. ....	Food and Drug Building, Tunney's Pasture
HALIFAX N.S. ....	105 Hollis Street, P.O. Box 605
MONTREAL, P.Q. ....	Room 800, 400 Youville Square
TORONTO, Ont. ....	55 St. Clair Avenue, East
WINNIPEG, Man. ....	Room 310, Federal Building, Main and Water Streets
VANCOUVER, B.C. ....	Room 504, Federal Building, 325 Granville Street

### Food and Drug Offices

OTTAWA, Ont. ....	Food and Drug Building, Tunney's Pasture
HALIFAX, N.S. ....	105 Hollis Street, P.O. Box 605
CHARLOTTETOWN, P.E.I. ....	5th Floor, Confederation Building, P.O. Box 1311
SAINT JOHN, N.B. ....	Room 517, New Customs Bldg., P.O. Box 396, Prince William Street
SYDNEY, N.S. ....	Federal Building, P.O. Box 324
ST. JOHN'S, Nfld. ....	Sir Humphrey Gilbert Bldg., P.O. Box 5115
QUEBEC, P.Q. ....	Gare Maritime Champlain, Room 277, Anse au Foulon
THREE RIVERS, P.Q. ....	Post Office Building, P.O. Box 1146
HULL, P.Q. ....	Room 206, Federal Bldg., Rue Principale
SHERBROOKE, P.Q. ....	Room 232, 315 King Street, West, P.O. Box 1120
MONTREAL, P.Q. ....	Room 800, 400 Youville Square
TORONTO, Ont. ....	55 St. Clair Avenue, East
CORNWALL, Ont. ....	Federal Building, 45 Second Street, East
BELLEVILLE, Ont. ....	New Federal Building, P.O. Box 93, Pinnacle Street
HAMILTON, Ont. ....	530 National Revenue Building, 150 Main St. West at Caroline
KITCHENER, Ont. ....	Room 1517, Dominion Public Building, P.O. Box 33, Duke and Frederick Streets
LONDON, Ont. ....	Room 417, Dominion Public Building, P.O. Box 504, 457 Richmond Street
WINDSOR, Ont. ....	Dominion Public Building, 137 Ouellette Street
SUDBURY, Ont. ....	New Federal Building, P.O. Box 564
PORT ARTHUR, Ont. ....	Room 313, Public Building, 33 Court Street, South
WINNIPEG, Man. ....	Federal Building, Main and Water Streets
BRANDON, Man. ....	Room 227, Federal Building, P.O. Box 416



SASKATOON, Sask. ....	307 London Building, Cor. 20th St. East and 3rd Avenue
REGINA, Sask. ....	Room 312, Motherwell Building
CALGARY, Alta. ....	209 Customs Building
EDMONTON, Alta. ....	Room 541, Federal Building
KAMLOOPS, B.C. ....	Room 7, 345 Victoria Street
VANCOUVER, B.C. ....	Federal Building, 325 Granville Street
VICTORIA, B.C. ....	Room 408, Belmont Building, 804 Government Street

#### Prosthetic Services Offices

HALIFAX, N.S. ....	c/o Camp Hill Hospital
LANCASTER, N.B. ....	c/o Lancaster Hospital
MONTREAL, P.Q. ....	c/o Queen Mary Veterans Hospital, 4565 Queen Mary Road
TORONTO, Ont. ....	c/o Sunnybrook Hospital, Bayview Avenue
OTTAWA, Ont. ....	c/o D.N.D. Medical Centre, 355 Smyth Road
LONDON, Ont. ....	c/o Westminster Hospital, Wellington Road
WINNIPEG, Man. ....	c/o Deer Lodge Hospital
REGINA, Sask. ....	Motherwell Building, Victoria Avenue and Rose Street
EDMONTON, Alta. ....	c/o University Hospital
CALGARY, Alta. ....	c/o Colonel Belcher Hospital
VICTORIA, B.C. ....	c/o Veterans Hospital
VANCOUVER, B.C. ....	c/o Shaughnessy Hospital

#### Public Health Engineering District Offices

MONCTON, N.B. ....	Post Office Building, P.O. Box 86
MONTREAL, P.Q. ....	150 St. Paul Street, West
WINNIPEG, Man. ....	2nd Floor, Postal Station B, Magnus Avenue at Main Street
EDMONTON, Alta. ....	Room 541, Federal Public Bldg.
VANCOUVER, B.C. ....	6th Floor, Room 605, 1110 West Georgia Street
KINGSTON, Ont. ....	P.O. Box 535

#### Laboratory of Hygiene

OTTAWA, Ont. ....	Tunney's Pasture
-------------------	------------------

## Occupational Health Laboratories

OTTAWA, Ont. .... Environmental Health Centre,  
Tunney's Pasture

### Radiation Protection

OTTAWA, Ont. .... Brookfield Rd., Confederation Heights

### Public Health Engineering

OTTAWA, Ont. .... Environmental Health Centre,  
Tunney's Pasture

### Aerospace Medicine

OTTAWA, Ont. .... Environmental Health Centre,  
Tunney's Pasture

### Ottawa Bureau

OTTAWA, Ont. .... 402 Albert Street

### Narcotic Control

OTTAWA, Ont. .... Colonel By Towers, 66 Muriel Street

### Regional Offices - Medical Services

Responsible for Indian Health Services; Northern  
Health Service; Quarantine, Immigration, Sick  
Mariners; Civil Service Health and Civil Aviation  
Medicine.

EASTERN .... Kenson Building, 233 Metcalfe Street  
Ottawa 4, Ontario

CENTRAL .... 705 Commercial Bldg.,  
169 Pioneer Avenue  
Winnipeg 1, Manitoba



SASKATCHEWAN .....	500 Derrick Building Eleventh Avenue and McIntyre Street Regina, Saskatchewan
ALBERTA.....	501 Chancery Hall Edmonton, Alberta
NORTHERN .....	501 Chancery Hall Edmonton, Alberta
PACIFIC.....	6th Floor, 1110 West Georgia Street Vancouver 5, B.C.
EUROPEAN .....	38 Grosvenor Street London W.1, England

### Immigration Medical Services Offices

#### Canada

ST. JOHN'S, Nfld. ....	Federal Building
GANDER, Nfld. ....	Gander Airport
STEPHENVILLE, Nfld. ....	Harmon Field Airport
SYDNEY, N.S. ....	63 Charlotte Street
HALIFAX, N.S. ....	Immigration Building
MONCTON, N.B. ....	Moncton Airport
SAINT JOHN, N.B. ....	89 Canterbury Street
QUEBEC, P.Q. ....	Champlain Harbour Station Wolfe's Cove
MONTREAL, P.Q. ....	150 St. Paul Street West
DORVAL, P.Q. ....	Montreal International Airport
OTTAWA, Ont. ....	Ottawa International Airport
MALTON, Ont. ....	Toronto International Airport
WINDSOR, Ont. ....	Windsor Airport
LONDON, Ont. ....	London Airport
WINNIPEG, Man. ....	705 Commercial Bldg., 169 Pioneer Avenue and Winnipeg International Airport
EDMONTON, Alta. ....	Edmonton International Airport
VANCOUVER, B.C. ....	Immigration Building, foot of Burrard St. and Vancouver International Airport
VICTORIA, B.C. ....	816 Government Street

#### Overseas

VIENNA, Austria .....	Canadian Embassy, Medical Section Tuchlauben 8, Vienna 1010
BRUSSELS, Belgium .....	230 rue Royale
HONG KONG .....	25th Floor, International Bldg., 141 Des Voeux Rd. Central

COPENHAGEN, Denmark .....	Canadian Embassy, Visa Office Osterbrogade 43
LIVERPOOL, England .....	17 Harrington Street, Liverpool 2
LONDON, England .....	38 Grosvenor Street, London W.1
LEEDS, England .....	City House, New Station St., Leeds 1
BIRMINGHAM, England .....	The Rotunda, New Street Birmingham 2
PARIS, France .....	38 Avenue de l'Opera
HAMBURG, Germany .....	2 Hamburg 50, Schillerstrasse 47 - 49
COLOGNE, Germany .....	Canadian Embassy, Visa Section Buchheimerstrasse 64/66 Weiner Platz, Cologne-Meulheim
STUTTGART, Germany .....	Marquardt Gebaeude, Koenigstrasse 20
ATHENS, Greece .....	Canadian Embassy, 8 Othonos St. Athens 118
THE HAGUE, Holland .....	12 Carel Van Bylandtlaan
ROME, Italy .....	Via Zara, No. 30
MILAN, Italy .....	Canadian Consulate General, Visa Office Via Turati 27
BELFAST, Northern Ireland .....	Canada House, 22 North St.
LISBON, Portugal .....	Canadian Embassy, Edificio L'Urbaine - Vie 50 Praca Marques de Pombal 14 -5D
GLASGOW, Scotland .....	Fleming House, 134 Renfrew St., Glasgow C 3
BERNE, Switzerland .....	Canadian Immigration Medical Section Helvetia Life, 3rd Floor 11 Belpstrasse

#### Quarantine Stations and Sub-Stations

EDMONTON, Alta. ....	Edmonton International Airport
GANDER, Nfld. ....	Gander Airport
ST. JOHN'S, Nfld. ....	Federal Building
SYDNEY, N.S. ....	63 Charlotte St. and Airport
HALIFAX, N.S. ....	Pier 21 and International Airport
SAINT JOHN, N.B. ....	Pier 9
QUEBEC, P.Q. ....	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q. ....	150 St. Paul Street West and 320 Baldwin St.
BAIE COMEAU, P.Q. ....	Sub-Station
SEVEN ISLANDS, P.Q. ....	Sub-Station
RIMOUSKI, P.Q. ....	Sub-Station
PORT ALFRED, P.Q. ....	Sub-Station
THREE RIVERS, P.Q. ....	Sub-Station
SOREL, P.Q. ....	Sub-Station
PORT CARTIER, P.Q. ....	Sub-Station

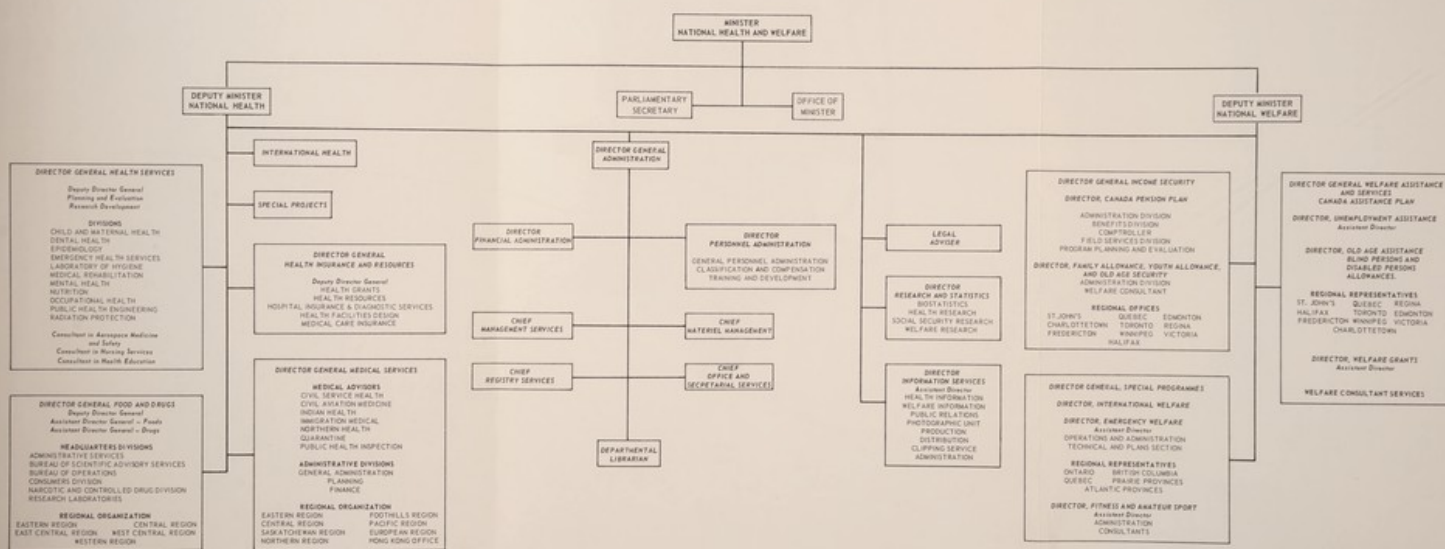


DORVAL, P.Q. ....	Montreal International Airport
VICTORIA, B.C. ....	816 Government Street
VANCOUVER, B.C. ....	Immigration Building and Vancouver International Airport

#### Sick Mariners Clinics

HALIFAX, N.S. ....	Immigration Building, Pier 21
SYDNEY, N.S. ....	63 Charlotte Street
SAINT JOHN, N.B. ....	89 Canterbury Street
QUEBEC, P.Q. ....	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q. ....	150 St. Paul Street West
VANCOUVER, B.C. ....	Immigration Building, foot of Burrard Street
VICTORIA, B.C. ....	816 Government Street

# DEPARTMENT OF NATIONAL HEALTH AND WELFARE





# DEPARTMENT OF NATIONAL HEALTH AND WELFARE

MINISTER  
NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE

DEPARTMENT OF NATIONAL HEALTH AND WELFARE





