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DEPARTMENT OF  
NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

FOR THE FISCAL YEAR ENDED MARCH 31, 1961





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CANADA

THE DEPARTMENT OF  
NATIONAL HEALTH AND WELFARE

# ANNUAL REPORT

FOR THE FISCAL YEAR  
ENDED MARCH 31

**1961**

Respectfully submitted,

J. WALDO MONTRITH,

Minister of National Health and Welfare

Roger Duhamel, F.R.S.C.  
Queen's Printer and Controller of Stationery,  
Ottawa, 1961

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*To the Honourable J. Waldo Monteith, F.C.A., M.P.,  
Minister of National Health and Welfare, Ottawa.*

SIR:

We take pleasure in submitting herewith the Annual Report of the Department of National Health and Welfare for the fiscal year 1960-61.

A number of developments during the year stand out as of particular importance.

The Hospital Insurance and Diagnostic Services Program was implemented by the Province of Quebec on January 1, 1961. Earlier in the fiscal year, it had come into operation in the Northwest Territories and the Yukon. The program is now fully implemented across Canada but continues to offer scope for further development. In particular, many provinces have not as yet taken full advantage of the provisions in the federal legislation for the sharing of costs related to insured out-patient services.

The Prime Minister's announcement of the setting up of a Royal Commission on Health Services marked a new milestone in the health field. The purpose of the Commission was announced to be the making of a "comprehensive study of Canada's national health requirements and the existing deficiencies in health care with a view to consideration of the establishment of a National Health Plan". The Honourable Emmett Hall, Chief Justice of Saskatchewan, was appointed as chairman.

In the Speech from the Throne of November 17, the Government's intention was announced of continuing federal support for hospital construction projects to the end of March, 1968. While present commitments would not have run out until 1963, it was felt that this added assurance of support would assist the provinces and municipalities in drawing up long-term plans. This further assistance to hospital construction followed that taken in January, 1958, when the level of federal aid was more than doubled and its scope extended to cover internes' residences and renovation of existing hospital facilities.

Other grants of the National Health Grants Program were also revised. Funds made available to the provinces in various special fields were adjusted to meet current needs. Among the more notable changes were increases of \$5.4 million for General Public Health, \$1.6 million for Medical Rehabilitation, \$1.5 million for Mental Health and \$1.2 million each for Professional Training and Public Health Research.

The year gave promise of a significant new advance in the prevention of paralytic poliomyelitis. Supplies of a live polio virus oral vaccine of the Sabin type were developed and produced at the Connaught Medical Research Laboratories in Toronto and plans for similar production were initiated at the Institute of Microbiology and Hygiene in Montreal. Demonstrations of the use of the new vaccine were carried out in several areas, the largest project being at Prince



Albert, Saskatchewan, where the vaccine was administered to over 20,000 persons. At the end of the year results were still awaited, but it was expected that they would be favourable and that licensing of the vaccine would be possible within the next few months.

The principal highlight of the department's welfare activities during 1960-61 was an amendment to the Old Age Security Act, which came into operation on July 1, 1960, and had two effects. Provision was made for benefits to be paid to pensioners temporarily absent from Canada while they are actually out of the country. Provision was also made for pensioners who have lived in Canada for at least twenty-five years after their twenty-first birthday to continue to receive benefits out of the country for an indefinite period. It therefore became possible for a person who has qualified for Old Age Security and who has the necessary residence requirement, to live abroad permanently and still draw his pension.

Further consideration was given to the broad subject of Canada's Social Security Programs. This long-term study, which stemmed from the findings of the Clark Report, had for its main objective the development of steps for improvements in the protection now afforded to Canadians. In the same general context, a reassessment was being carried out of approaches to social assistance.

Finally, the year witnessed increasing attention to physical fitness, which was forecast in the Speech from the Throne. Immediate indication of Government interest was provided in the allocation of a grant of \$10,000 to the Canadian Olympics Association for studies in connection with a possible Canadian site for the 1968 Olympic Winter Games.

Sir, in concluding this letter of transmittal, we would draw attention to the continued loyalty and devotion to duty of members of the staff. As in years past, their efforts have been a vital factor in the progress achieved throughout the many areas of the department's responsibilities.

Respectfully submitted,

G. D. W. CAMERON,

*Deputy Minister of National Health  
and Welfare (Health)*

J. W. WILLARD,

*Deputy Minister of National Health  
and Welfare (Welfare)*

Ottawa, Canada.



# HEALTH BRANCH

## INTRODUCTION

A comprehensive report on the activities of a complex department would fail in its purpose if it did not deal in some detail with the operations of the individual, often highly specialized divisions. For the benefit of the lay reader historical or descriptive material has in some cases been included, and highly technical or statistical content omitted unless really significant.

While the arrangement permits examination of the individual components according to the interest of the reader, there is in actual practice a high degree of interdependence between many of the divisions and a co-ordination of all in the promotion of a broad public health policy. Appropriate references to this effect will occasionally be noted in the text.

As in previous years, a breakdown is appended of the total estimates for the Health Branch for the fiscal year as well as for the preceding year for purposes of comparison.

TABLE 1  
COMPARISON OF 1959-60 AND 1960-61 ESTIMATES FOR NATIONAL  
HEALTH BRANCH

	1960-61	%	1959-60	%
STATUTORY OBLIGATIONS.....	\$ 6,888,733	2.8	\$ 7,156,123	3.0
Quarantine and Leprosy				
Immigration Medical Services				
Sick Mariners Treatment Services				
Public Health Engineering				
Civil Service Health				
Civil Aviation Medicine				
Administration of the Food and Drugs and the Pro-				
prietary or Patent Medicine Acts				
Administration of the Opium and Narcotic Drugs Act				
CO-OPERATION WITH PROVINCES.....	2,579,813	1.0	2,336,787	0.9
Laboratory of Hygiene				
Occupational Health				
Radiation Protection				
Consultant and Advisory Services				
HOSPITAL INSURANCE PROGRAM.....	167,000,000	66.9	160,000,000	66.7
GENERAL HEALTH GRANTS.....	48,000,000	19.2	46,000,000	19.1
INDIAN AND NORTHERN HEALTH SERVICES....	24,379,754	9.8	23,829,552	10.0
MISCELLANEOUS GRANTS.....	208,250	0.1	213,250	0.1
NATIONAL HEALTH BRANCH—ADMINISTRATION.	457,684	0.2	398,299	0.2
	\$249,514,234	100.0	\$239,934,011	100.0



## FOOD AND DRUG DIRECTORATE

### **General**

For just eleven cents a year, every Canadian enjoys the assurance that foods he eats and the medicine he requires are at least as pure and as safe as can be obtained anywhere in the world. This is what it costs the taxpayer per head of population to administer and enforce the Food and Drugs Act and the Proprietary or Patent Medicine Act, two laws that protect the consuming public against health hazards, fraud, deceptive labelling and misleading advertising.

Program Planning, under the immediate supervision of the Associate Director, has developed considerably in the past year.

New developments in the food and drug industries continue to bring new problems. The increasing use of chemicals as additives to foods has been of growing concern in many parts of the world.

In 1959 a Food Additive Committee was set up within the directorate to consider the consolidation of food additive regulations and a more orderly procedure that would completely cover all such additions to foods. Industry was asked to assist by supplying information and has for the most part, co-operated willingly and usefully. Food additive regulations should function to protect the consumer, while at the same time providing ample opportunity for technological development and progress.

A number of national and regional surveys on collaborative studies were conducted by headquarters and regional laboratories. These included projects on: the chemical determination of vitamin D, panthenol and folic acid; additional crude fibre determinations on cocoa; the examination of imported raisins, dried apricots, pears, peaches, fig paste and date paste for filth; the insoluble ash content of a number of spices; the investigation of proposed pesticide methods; further development work on field tests for nitrites and nitrates; a better procedure for the chromatographic identification of emulsifiers; determination of vitamin C content of fruit drinks; fill of peanut butter containers; vitamin content of enriched flour and enriched bread; illegal sales of barbiturates; detection of horsemeat in smoked or fresh sausages and in hamburgers; raisin content of raisin bread; pasteurization of cheese and moisture content of cheese spreads; fat content of chocolate drinks; egg content of alimentary pastes claimed to contain eggs; determination of artificial sweeteners in soft drinks in the absence of label declaration; the composition of pharmaceutical products and chocolate bars for receptive packaging and disintegration time of tablets. Projects begun previously on the acidity of lime juice and the identification of narcotic drugs and prescription drugs were completed.

Imports, which must comply with Food and Drug Regulations in the same way as domestic products are examined on arrival at entry ports. Control over Canadian products is exercised by factory inspection and by sampling of commodities at the retail level. During the year 30,000 samples were analysed or examined and 4,188 inspections of food and drug manufacturing plants were completed.



A further step towards providing better service to the public was taken with the re-opening of the Brandon Office.

The Poison Control Program begun in the spring of 1957 has developed into a nation-wide network of Poison Control Centres in which 191 hospitals take an active part, and this number is growing. The connecting link in this chain of centres is the central clearing house operated in Ottawa by the directorate whose contribution, in addition to setting up the information system and keeping it up to date, is to summarize reports, pool information and resources, and pass it on to the centres. In this way the centres are kept posted on the general progress of the campaign. During the year about 10,000 cases of accidental poisoning were reported. A preventive program is constantly carried on by the Consumer Relations Section which tries with every means at its disposal to impress upon the public the necessity of keeping potentially dangerous substances out of the reach of small children, who constitute by far the greatest number of poisoning victims. Many copies of the booklets "Keep Your Home Free from Poisonings", "Don't Poison Your Family" and "If it is not Food it is Poison" were distributed and the film "One Day's Poison" was shown to groups and organizations.

The Consumer Relations Section prepared two new booklets, "The Consumer's Handbook" and "The Label Story" and revised the leaflet "Safe to Take". A program of speaking engagements and attendance at exhibitions, conventions, and scientific and other gatherings was carried out and numerous consumer complaints and enquiries were dealt with.

### **Labelling of Foods**

The promulgation of new labelling regulations on January 1, 1960 presented many new problems. As a result, the food labelling regulations were further amended early in the summer of 1960. All labels on the Canadian market, covering an estimated 250,000 products both domestic and imported, will have to meet the new labelling requirements by January 1, 1962. Eighteen thousand food labels were reviewed—exactly twice as many as the previous year. In addition, 19,833 television and radio continuities for foods were reviewed and 200 interviews were granted. A significant trend has developed this year in that the food labelling regulations promulgated by other government agencies parallel our own in principle. This means in effect that those labels coming under the jurisdiction of other departments will, if labelled in accordance with their regulations, meet our requirements.

### **Protection of the Drug Supply**

The Drug Unit has been able to assume more direct control over the Drug Plant Inspection program and further developments in that direction are expected as stricter requirements of drug manufacturing controls are instituted. A new trend is appearing in the labelling of drugs intended for the exclusive use of the medical profession. Experience in the use of new life-saving drugs often indicates that serious and even fatal side-reactions may develop that were not evident at first. In order



to alert physicians to these dangers the labels and promotional literature of certain drugs should carry suitable warnings. A regulation to that effect in respect to chloramphenicol is expected to be effective shortly.

The promotion and advertising of certain items created particular problems. These included ready-diet reducing plans; vitamin-mineral supplements peddled from door to door or by mail; vibrating and massaging apparatus promoted for the treatment of serious disease, and protein supplement. There were 5,021 drug labels, advertisements and trade marks reviewed as well as 5,482 radio and television commercials and 273 interviews were granted.

During the year 182 new drug submissions were received from pharmaceutical manufacturers in Canada, the United States and a number of European countries. In addition there was a carry-over of 71 submissions which were under consideration at the beginning of the year. The total of 253 for this year compares to 262 for last year, indicating a similar volume of activity in the industry but it is noticeable that the submissions received from many of the new firms dealing with new drugs are not as well prepared. It appears that fewer new chemical entities are being developed and a greater number of duplicated products and products with minor differences are being presented for review.

The Proprietary or Patent Medicine Act is concerned exclusively with secret formula medicines sold under proprietary or trade names, and its control rests mainly on registration before marketing and renewal of registration by annual licence. In each case the formulae and claims are reviewed with the help of medical officers, pharmacologists and an advisory board established under Section 9 of the Act. The official register now includes over 3,000 preparations. A total of 461 applications for new products were received, of which 221 were registered and the rest refused. Licences have been issued to 1,035 manufacturers.

### **Legal Actions**

The 70 completed prosecutions were made up of 41 involving foods and 29 involving drugs. Fines levied totalled \$10,445. Control of drug stores continued to improve and the number involved in the illegal sale of prescription drugs was smaller than last year. Prosecutions initiated for the illegal sale of barbiturates by other than druggist outlets resulted in jail sentences in three instances.

Several prosecutions based on the sale of butter adulterated with foreign fat were completed and recent surveys show that this type of adulteration is no longer a problem. The sale of horsemeat without label declaration still requires attention. Thirteen prosecutions resulted in fines totalling \$2,650. The Department of Agriculture co-operated in the prosecution of several firms for selling artificially flavoured table syrup as maple syrup.

Sixty seizures with a value of more than \$42,000 were confiscated. Articles which could not be brought into compliance by reprocessing or relabelling were destroyed.

### **Investigation and Research**

The Laboratory Services of the Directorate consist of the central laboratory in Ottawa and five regional laboratories in Halifax, Montreal, Toronto, Winnipeg



and Vancouver. The central laboratory is responsible for carrying out basic research on foods and drugs and the development of analytical procedure for enforcement purposes. The regional laboratories concentrate on the examination of all products which come under the Act and also carry out investigational work, as time permits, on methods of analysis.

The central laboratory consists of eleven sections in the biological, chemical and physical sciences, each headed by an expert in his particular field.

The scientific work of the laboratory has attracted national and international attention and many requests were received from scientists who wished to receive training or conduct research in specific areas of work. It was possible to provide the necessary space and facilities for thirteen of these persons. Two chemists from the West Indies, one from India and two from Brazil received training in drug analysis. Instruction was provided on techniques developed in this laboratory for the isolation and purification of staphylococcal toxins to one scientist from West Germany, one from Italy and three from Canadian laboratories. One chemist from India spent twelve months learning analytical techniques used on foods and drugs in general, while another from Chile was trained in procedures for vitamin analysis. A senior research analyst from Australia took part in the research program on opium and other narcotic drugs. Two National Research Council post-doctorate Fellows carried out their research in the laboratory, one in pharmacology and the other on the chemistry of essential oils. These training and research programs were financed by the institutions to which the scientists were attached, by national governments, the Colombo Plan, the World Health Organization and the National Research Council.

### ***Animal Pathology***

Post-mortem examinations were performed on 1,236 animals, most of which were on specific test, and 4,154 sections on animal tissue from nine separate projects were examined microscopically.

To broaden the means of assessing the effect of food additives and drugs on experimental animals, hematological examinations and liver function tests were carried out on a routine basis.

### ***Biophysics***

The survey, commenced last year, of the residual radioactivity in Canadian foods due to fallout was continued. The total beta radioactivity of 347 food samples was determined. A report was prepared on cereals, sea foods, processed fruits and vegetables, dried fruits and tea.

### ***Cosmetic and Dairy Products***

Methods of analysis for metallic hair dyes containing heavy metal salts and organic hair dyes containing coal-tar dye bases were developed using the techniques of chromatography, polarography and spectrophotometry. Studies on annatto colouring materials used in dairy products revealed the presence of complex mixtures of degradation and isomerization products of the naturally occurring



carotenoid pigment. An analytical method was devised for the detection of the coal-tar colours Oil Yellow AB and OB in butter and margarine for use by the regional laboratories.

### **Food Chemistry**

In the field of pesticide residue research, two chromatographic procedures have been developed for the identification of organophosphorus compounds; a new procedure for removing extraneous matter from pesticides prior to their determination has been devised; preliminary studies have been carried out using starch gel electro-phoresis as a means of detecting phosphorous-containing pesticides.

Gas chromatography has been applied with great success in the field of flavouring preparations for the identification of natural materials and the detection of possible adulteration. Evidence of the adulteration of butter from five creameries, based on differential infra-red spectroscopy has been provided. The glyceride structure of horse and beef fat has been studied by the fractionation of the triglycerides on a silicic acid column.

A qualitative method for the determination of safrole has been developed. Advice has been given for the setting of tolerances for filth in a number of additional foods and an examination of possible means of determining the fruit content of jams has been made. Commercial vanilla extracts have been examined for strength and authenticity.

### **Microbiology**

New or changing food technology results in ecological changes within the microbial population of the foods. Specific changes of this nature have been investigated in relation to food-borne infection and food poisoning. The use of plastic wrappers in the vacuum-pack method has allowed formation of toxin of *Clostridium botulinum* type E in smoked fish, and of staphylococcal enterotoxin in bacon, each without showing spoilage. The use of unpasteurized egg-products in "convenience" foods such as cake mixes and frozen dessert pies, usually contaminates the foods with *Salmonella*, as shown by application of a new method for isolation of *Salmonella* from foods. Improvement in the bacteriological quality of pre-cooked frozen foods has reduced food poisoning hazards to a low level. Much milk used in the manufacture of dairy products is of poor bacteriological quality. Cheese frequently contains very large numbers of staphylococci. Toxin may remain after most staphylococci have died. One third of a number of highest quality "old" cheddar cheese was found to be made from pasteurized milk, thus contradicting a popular fallacy that pasteurized milk is not suitable for making such cheese. Antibiotic residues in milk continue to pose some hazard in relation to penicillin allergy and impaired cheese production.

Gamma irradiation at progressively increasing dose-rates has induced resistance up to 15-fold in several bacteria of public health importance. Other mutations are being investigated.



### **Organic Chemistry**

Paper chromatographic procedures for antihistamines, barbiturates, alkaloids, and bases often submitted by the RCMP as suspected narcotics were investigated to enable analysts to distinguish the chemically related substances for purposes of establishing *prima facie* evidence for drug identity for enforcement purposes. Basic methods for assay of many new synthetic narcotics have been published and received favourable international recognition of their value in forensic science.

### **Pharmaceutical Chemistry**

Studies were carried out on the effect of filler material in tablets and capsules on the assay results obtained by titrimetric techniques in non-aqueous solvents. Identification tests for a number of sulfonamides were developed. Studies on tablet disintegration were conducted in collaboration with the Canadian Pharmaceutical Manufacturers' Association. The official method for the determination of the disintegration time of tablets was revised.

### **Pharmacology and Toxicology**

Chronic administration of fluoride at seven parts per million in the diet increased the sensitivity of the central nervous system of the rat to a number of drugs as well as to electroshock. This finding was confirmed in monkeys receiving orally two mg. fluoride per kilogram body weight daily.

Oral toxicity testing of food colours was continued. One colour (Ponceau 3R) of the five tested, was found to be unsuitable for use in food. Experiments are in progress to learn whether or not two additional dyes are capable of producing tumours when injected into rats subcutaneously.

### **Physiology and Hormones**

Organic chemists have been able to alter the molecular structure of the adrenocortical hormones, cortisone and hydrocortisone, to produce analogues with enhanced potency and fewer physiological side effects. The ability of these analogues to induce involution of the thymus gland was used to study the influence of various groups on the biological activity. Assay procedures have been studied for measuring corticotrophin activity in intact animals. These have included the thymus involution procedures as well as a method involving adrenal ascorbic acid depletion after blockage of the anterior pituitary gland with adrenocortical steroids.

Desiccated thyroid samples prepared from beef, pork and sheep were obtained from the United Kingdom and were assayed by means of the goitre-prevention procedure. On the basis of total iodine, all of the British samples had essentially the same potency as pork thyroid from the United States.

A study has been made of methods for extracting and measuring estrogenic steroids in pharmaceutical preparations and cosmetics (hormone creams).



### Vitamin and Nutrition

New chemical methods were developed for the determination of niacin in cereal products, niacinamide and panthenol in pharmaceuticals, N-methylnicotinamide in urine and a chemical method for vitamin D has replaced the biological assay. A microbiological assay for free lysine and methionine in small volumes of blood plasma was developed.

The physiological availability of vitamins in a variety of oral dosage forms was determined by giving the preparations to human subjects and determining the rate of urinary excretion of the vitamin studied. It was concluded that formulation of sustained-release riboflavin preparations is unwarranted and unnecessary, and claims for physiological advantage of this type of medication seem unjustified. Studies on the excretion of thiamine by human subjects indicated that oral doses greater than approximately 2.5 to 5.0 mg. were largely unabsorbed and wasted.

## INDIAN AND NORTHERN HEALTH SERVICES DIRECTORATE

A large part of the original races native to Canada still live under rather primitive conditions in relatively underdeveloped areas often remote from normal medical services and, in the main, lack both the knowledge and the means to arrange for such services themselves. The Federal Government, through this department, assumes a moral obligation to assist these people to meet their medical needs. Indian and Northern Health Services is charged with seeing that essential medical and health services are made available to any Indian or Eskimo unable to fend for himself.

In addition, because the sparsely populated northern territories have not developed their own health agencies, the directorate serves in lieu of a health department for the Yukon Territory and the Northwest Territories.

### **Populations Served**

In 1960 there were about 185,000 registered Indians. The general welfare and education of these is the responsibility of Indian Affairs Branch of the Department of Citizenship and Immigration. There are many other thousands of persons of Indian extraction but unless recorded on a band register they are presumed to be eligible for care in the same fashion as other citizens.

There are about 12,000 Eskimos. They are the particular concern of Northern Affairs Branch of the Department of Northern Affairs and National Resources except on the Labrador Coast where the provincial government assumes all obligations although with the assistance of this directorate for medical treatment.

In addition to the 1,800 Indians in the Yukon Territory there were about 12,000 other residents. In the Northwest Territories there were 8,500 Eskimos, 5,000 Indians and 9,500 others.

The closest co-operation with provincial and territorial governments and with other departments of the Federal Government has been as essential as the day by day management of programs.

### **Organization**

There are five regions based on offices in Vancouver, Edmonton, Regina, Winnipeg and Ottawa. The Central Office in Ottawa co-ordinates, while the regional offices direct programs for treatment and public health services through zones which in many instances are centred on a departmental hospital. There were 2,517 staff positions of which 115 were for medical officers, 28 for dental officers and 661 for graduate nurses. These positions, as well as the 35 for senior administrative officers, are rarely all filled because of chronic scarcity of the right types



willing to accept fairly rigorous conditions. Wherever practical Indians and Eskimos are employed. There were 320 registered Indians and 10 Eskimos in positions last year.

The permanent organization is augmented by the extensive use of local physicians, dentists and, of course, community hospitals which are used wherever available. There has been an increasing integration with provincial and municipal health agencies. A close association with the latter is maintained because the directorate attempts to carry on as though it were the community health service until such time as the native group can form one on its own or in association with its neighbours.

Finally, in almost every native community of any size, some interested person supervises a supply of appropriate remedies and forms the first line of attack on incipient disease or calls for more skilled assistance when this is indicated.

### ***Extended Services***

Constant remoulding goes on because communities expand—the birth rate for some groups is double the Canadian average—and populations shift towards more attractive conditions of life or work. Occasionally a unit is closed out as at Nootka on the west coast of Vancouver Island but generally there has been expansion. New nursing stations were opened at Lynn Lake and Pukatawagon in northern Manitoba. The dilapidated station at Cape Dorset on the south shore of Hudson Strait was replaced by a modern unit as was the health centre at Romaine on the lower north shore of the St. Lawrence.

A new health centre was acquired at Pemberton in southern British Columbia and at Bella Bella on the mid-west coast and one completed at Berens River on the east side of Lake Winnipeg. A new type of unit—overnight cabin—was provided at a number of strategic points in the near and far north where accommodation has been non-existent. Improvement of amenities for staff at several hospitals was achieved.

Finding illness among non-demonstrative people has been a first priority of the directorate and this has been maintained and extended. Tuberculosis is still a most serious condition among these people in spite of new remedies which hasten recovery. The real incidence of the disease is many times greater among the Indians and especially among the Eskimos compared with the general population. Surveys to detect illness in all groups but especially in the deep north continued to be very substantial operations with the objective of 100 per cent coverage only sometimes reached.

Another intensive concern has been protective inoculations. The environment is a constant threat to the unsophisticated. The aim here has been at least minimal protection against all the common communicable diseases with intensive campaigns where epidemic conditions threatened.

Care of infants and children continued to be of deep concern. Geographic, economic and cultural factors combine to make the death rate of the young inordinately high. More medical officers and nurses with specialized training are concentrating on this serious problem.

The ultimate objective has been the complete integration of the Indian and Eskimo into the pattern of his province or territory. During the year they were included in the extension of Hospital Insurance into the Northwest Territories and the Yukon Territory and in four instances, into provincial prepaid medical care plans.

Accompanying are tables showing:

Facilities by administrative areas

Capacity of Hospitals and Nursing Stations

Anti-Tuberculosis activities.

FACILITIES BY ADMINISTRATIVE AREAS				CAPACITY OF HOSPITALS AND NURSING STATIONS				ANTI-TUBERCULOSIS ACTIVITIES			
Province/Territory	Administrative Area	Facilities	Comments	Hospital	Nursing Station	Physician	Comments	Screening	Treatment	Prevention	Comments
ALBERTA	Calgary	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital	
	Edmonton	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital	
	Grande Prairie	Grande Prairie General Hospital		Grande Prairie General Hospital	Grande Prairie General Hospital	Grande Prairie General Hospital		Grande Prairie General Hospital	Grande Prairie General Hospital	Grande Prairie General Hospital	
	Medicine Hat	Medicine Hat General Hospital		Medicine Hat General Hospital	Medicine Hat General Hospital	Medicine Hat General Hospital		Medicine Hat General Hospital	Medicine Hat General Hospital	Medicine Hat General Hospital	
SASKATCHEWAN	Saskatoon	Saskatoon General Hospital		Saskatoon General Hospital	Saskatoon General Hospital	Saskatoon General Hospital		Saskatoon General Hospital	Saskatoon General Hospital	Saskatoon General Hospital	
	Regina	Regina General Hospital		Regina General Hospital	Regina General Hospital	Regina General Hospital		Regina General Hospital	Regina General Hospital	Regina General Hospital	
	Prince Albert	Prince Albert General Hospital		Prince Albert General Hospital	Prince Albert General Hospital	Prince Albert General Hospital		Prince Albert General Hospital	Prince Albert General Hospital	Prince Albert General Hospital	
	Yorkton	Yorkton General Hospital		Yorkton General Hospital	Yorkton General Hospital	Yorkton General Hospital		Yorkton General Hospital	Yorkton General Hospital	Yorkton General Hospital	
MANITOBA	Winnipeg	Winnipeg General Hospital		Winnipeg General Hospital	Winnipeg General Hospital	Winnipeg General Hospital		Winnipeg General Hospital	Winnipeg General Hospital	Winnipeg General Hospital	
	Brandon	Brandon General Hospital		Brandon General Hospital	Brandon General Hospital	Brandon General Hospital		Brandon General Hospital	Brandon General Hospital	Brandon General Hospital	
	St. James	St. James General Hospital		St. James General Hospital	St. James General Hospital	St. James General Hospital		St. James General Hospital	St. James General Hospital	St. James General Hospital	
	Portage la Prairie	Portage la Prairie General Hospital		Portage la Prairie General Hospital	Portage la Prairie General Hospital	Portage la Prairie General Hospital		Portage la Prairie General Hospital	Portage la Prairie General Hospital	Portage la Prairie General Hospital	
ONTARIO	Toronto	Toronto General Hospital		Toronto General Hospital	Toronto General Hospital	Toronto General Hospital		Toronto General Hospital	Toronto General Hospital	Toronto General Hospital	
	Ottawa	Ottawa General Hospital		Ottawa General Hospital	Ottawa General Hospital	Ottawa General Hospital		Ottawa General Hospital	Ottawa General Hospital	Ottawa General Hospital	
	London	London General Hospital		London General Hospital	London General Hospital	London General Hospital		London General Hospital	London General Hospital	London General Hospital	
	Hamilton	Hamilton General Hospital		Hamilton General Hospital	Hamilton General Hospital	Hamilton General Hospital		Hamilton General Hospital	Hamilton General Hospital	Hamilton General Hospital	
QUEBEC	Montreal	Montreal General Hospital		Montreal General Hospital	Montreal General Hospital	Montreal General Hospital		Montreal General Hospital	Montreal General Hospital	Montreal General Hospital	
	Quebec City	Quebec City General Hospital		Quebec City General Hospital	Quebec City General Hospital	Quebec City General Hospital		Quebec City General Hospital	Quebec City General Hospital	Quebec City General Hospital	
	Sherbrooke	Sherbrooke General Hospital		Sherbrooke General Hospital	Sherbrooke General Hospital	Sherbrooke General Hospital		Sherbrooke General Hospital	Sherbrooke General Hospital	Sherbrooke General Hospital	
	Shawinigan	Shawinigan General Hospital		Shawinigan General Hospital	Shawinigan General Hospital	Shawinigan General Hospital		Shawinigan General Hospital	Shawinigan General Hospital	Shawinigan General Hospital	
NEW BRUNSWICK	Fredericton	Fredericton General Hospital		Fredericton General Hospital	Fredericton General Hospital	Fredericton General Hospital		Fredericton General Hospital	Fredericton General Hospital	Fredericton General Hospital	
	St. John's	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital	
	Moncton	Moncton General Hospital		Moncton General Hospital	Moncton General Hospital	Moncton General Hospital		Moncton General Hospital	Moncton General Hospital	Moncton General Hospital	
	Shedden	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital	
NEW SCOTIA	Halifax	Halifax General Hospital		Halifax General Hospital	Halifax General Hospital	Halifax General Hospital		Halifax General Hospital	Halifax General Hospital	Halifax General Hospital	
	Antigonish	Antigonish General Hospital		Antigonish General Hospital	Antigonish General Hospital	Antigonish General Hospital		Antigonish General Hospital	Antigonish General Hospital	Antigonish General Hospital	
	St. John's	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital	
	Shedden	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital	
PELSEA	St. John's	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital	
	Antigonish	Antigonish General Hospital		Antigonish General Hospital	Antigonish General Hospital	Antigonish General Hospital		Antigonish General Hospital	Antigonish General Hospital	Antigonish General Hospital	
	St. John's	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital		St. John's General Hospital	St. John's General Hospital	St. John's General Hospital	
	Shedden	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital		Shedden General Hospital	Shedden General Hospital	Shedden General Hospital	
YUKON	Whitehorse	Whitehorse General Hospital		Whitehorse General Hospital	Whitehorse General Hospital	Whitehorse General Hospital		Whitehorse General Hospital	Whitehorse General Hospital	Whitehorse General Hospital	
	Yellowknife	Yellowknife General Hospital		Yellowknife General Hospital	Yellowknife General Hospital	Yellowknife General Hospital		Yellowknife General Hospital	Yellowknife General Hospital	Yellowknife General Hospital	
	Edmonton	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital	
	Calgary	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital	
NORTHWEST TERRITORIES	Yellowknife	Yellowknife General Hospital		Yellowknife General Hospital	Yellowknife General Hospital	Yellowknife General Hospital		Yellowknife General Hospital	Yellowknife General Hospital	Yellowknife General Hospital	
	Whitehorse	Whitehorse General Hospital		Whitehorse General Hospital	Whitehorse General Hospital	Whitehorse General Hospital		Whitehorse General Hospital	Whitehorse General Hospital	Whitehorse General Hospital	
	Edmonton	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital		Edmonton General Hospital	Edmonton General Hospital	Edmonton General Hospital	
	Calgary	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital		Calgary General Hospital	Calgary General Hospital	Calgary General Hospital	



TABLE 2  
I.N.H.S. FACILITIES BY REGION, ZONE, AND PROVINCE

Region and Regional Office	ADMINISTRATIVE AREAS		I.N.H.S. FACILITIES			
	Zone and Zone Office	Province	Hospital	Clinic	Nursing Station	Health Centre
EASTERN (Ottawa)	ATLANTIC (Amherst)	NOVA SCOTIA		Sydney	Ekasoni	Shubenacadie
		NEW BRUNSWICK				Big Cove Chatham Kingsclear
	QUEBEC (Quebec City)	QUEBEC (Northeast)		Caughnawaga	Bersimis Fort Chimo	Mingan Natashquan Pointe Bleue Restigouche Romaine Schefferville Seven Islands
	MOOSE FACTORY (Moose Factory)	QUEBEC (Northwest)			Fort George Great Whale River Paint Hills Port Harrison Povungnituk Rupert House	
		ONTARIO (Northeast)	Moose Factory	James Bay	Albany	
	OTTAWA (Ottawa)	QUEBEC (West)				Amos Maniwaki Manowan Mistassini Obediawan St. Regis Waawanipi
		ONTARIO (East)		Deseronto		
	SOUTHERN ONTARIO (Oshawa)	ONTARIO (South)	Lady Willingdon	Muncey Oshawa		Chippawa Hill Christian Island Orillia Peterborough Walpole Island

CENTRAL (Winnipeg)	NORTHERN ONTARIO (North Bay)	ONTARIO (North)	Frobisher Bay	Frobisher Bay Pangnirtung	Chapleau Manitowaning Parry Sound Sault Ste. Marie Sturgeon Falls Temiskaming
	EASTERN NORTHERN (Frobisher)	NORTHWEST TERRITORIES (Franklin District)	Sioux Lookout	Sioux Lookout	Cape Dorset Foxye
	SIoux LOOKOUT (Sioux Lookout)	ONTARIO (Northwest)	Sioux Lookout	Lac Seul Landowne House Pikangikum Sandy Lake Trout Lake	Fort Frances Kenora Nakina Pickle Lake Port Arthur
	SOUTHERN MANITOBA (Winnipeg)	MANITOBA (South)	Fisher River Fort Alexander	Fisher River Pine Falls	Berens River Brandon Dauphin Elphinstone Portage la Prairie Sandy Bay
	NORWAY HOUSE (Norway House)	MANITOBA (East)	Norway House	Norway House	
	THE PAS (The Pas)	MANITOBA (North)	Clearwater Lake	Churchill The Pas	Lynn Lake Nelson House Pukatawagan Split Lake
	CENTRAL NORTHERN (Winnipeg)	NORTHWEST TERRITORIES (Keewatin District)			Baker Lake Eskimo Point
	FORT QU'APPELLE (Fort Qu'Appelle)	SASKATCHEWAN (South)	Fort Qu'Appelle	Fort Qu'Appelle	Broadview Kamsack Punnichy Rose Valley White Bear
	NORTH BATTLEFORD (North Battleford)	SASKATCHEWAN (West)	North Battleford	North Battleford	Meadow Lake Onion Lake
	PRINCE ALBERT (Prince Albert)	SASKATCHEWAN (East)		Prince Albert	Pelican Narrows Fort a la Corne La Ronge Shellbrook
SASKATCHEWAN (Regina)					



TABLE 2  
I.N.H.S. FACILITIES BY REGION, ZONE, AND PROVINCE—Concluded

ADMINISTRATIVE AREAS			I.N.H.S. FACILITIES			
Region and Regional Office	Zone and Zone Office	Province	Hospital	Clinic	Nursing Station	Health Centre
FOOTHILLS (Edmonton)	CHARLES CAMSELL (Edmonton)	ALBERTA (Edmonton Agency)	Charles Camsell	Edmonton		
	ALBERTA (Edmonton)	ALBERTA (Except Edmonton Indian Agency)	Blackfoot Blood Hobbema	Hobbema	Fort Chipewyan Goodfish Lake Hay Lake Peigan Saddle Lake Stony	Bonnyville Calgary Driftville Fort Vermilion High Prairie Rocky Mountain House
	MACKENZIE (Edmonton)	NORTHWEST TERRITORIES (Mackenzie District)	Inuvik	Fort Simpson Fort Smith Rae	Aklavik Cambridge Bay Coppermine Fort Good Hope Fort Liard Fort McPherson Fort Norman Spence Bay Tuktoyaktuk	Fort Resolution Yellowknife
	YUKON (Whitehorse)	YUKON	Whitehorse	Whitehorse		Dawson Haines Junction Mayo Watson Lake
PACIFIC (Vancouver)	COQUALEETZA (Sardis)	BRITISH COLUMBIA (South)	Coqualeetza	Alexis Creek Sardis Vancouver Williams Lake		Kamloops Lillooet Mount Currie
	NANAIMO (Nanaimo)	BRITISH COLUMBIA (West)	Nanaimo	Nanaimo		Alert Bay Bella Bella Duncan Tofino
	MILLER BAY (Miller Bay)	BRITISH COLUMBIA (North)	Miller Bay	Miller Bay		Aiyansh Hazelton Masset Port Simpson Vanderhoof

Revised July 18, 1961, by: Systems and Statistics Section,  
Indian and Northern Health Services,  
Department of National Health and Welfare.

TABLE 3  
I.N.H.S. FACILITIES BY REGIONS, JULY 18, 1961

I.N.H.S. Region	Province	Facilities						
		Hospitals			Clinics	Nurs. St'ns.		Health Centres
		No.	Rated Cap.			No.	Rated Bed Cap.	
			Beds	Bass.				
Eastern	N.S.....				1	1	4	1
	N.B.....							3
	Que.....				1	8	32	14
	Ont.....	2	204	15	4	1	4	11
	N.W.T.....	1	13	5	2	2	8	
	Totals.....	3	217	20	8	12	48	29
Central	Ont.....	1	72	2	1	5	20	5
	Man.....	4	225	16	5	11	44	6
	N.W.T.....					2	8	
	Totals.....	5	297	18	6	18	72	11
Sask.	Sask.....	2	154	13	3	1	4	10
Foothills	Alta.....	4	592	22	2	6	24	6
	Yukon.....	1	90	30	1			4
	N.W.T.....	1	80		3	9	39	2
	Totals.....	6	762	52	6	15	63	12
Pacific	B.C.....	3	562		6			12
Grand Totals.....		19	1,992	103	29	46	187	74



TABLE 4  
ANTI-TUBERCULOSIS ACTIVITIES, CALENDAR YEAR 1960

Region	Category of Persons	Population (1)	Number of X-Rays Taken			Number of Active Cases Discovered						Number of Cases Discovered by Surveys Hospitalized Before January 1, 1961	Number of B.C.G. Vaccinations (2)		
			On Field Surveys			On School Surveys	On All Surveys	By Field and School Surveys						Grand Totals	
								Diagnosed for First Time	Previously known		Totals				By Other Means
									Active on Last Examination	Re-Activated Since Last Examination					
Eastern	Indians Eskimos	62,000 7,000	15,718 5,989	374	16,092 5,989	97 129	19	39 7	155 136	58	150 134	1,191 220			
	Totals	69,000	21,707	374	22,081	226	19	46	291	58	284	1,411			
	Indians Eskimos	36,000 1,900	19,786 1,397	2,424	22,210 1,397	41 14		23 3	64 17	85 3	68 17	459			
Saskatchewan	Totals	37,900	21,183	2,424	23,607	55		26	81	88	85	459			
	Indians	23,750	12,713	3,410	16,123	27		4	31	107	31	239			
	Indians Eskimos	26,750 3,100	14,557 1,675	4,409 451	18,966 2,125	37		18	55	204	55	602			
Foothills	Totals	29,850	16,232	4,860	21,092	37		18	55	204	55	602			
	Indians	37,000	13,589	4,146	17,735	35	1	19	55	69	41	546			
	Indians Eskimos	185,500 12,000	76,363 9,061	14,763 451	91,126 9,512	237 143	20	103 10	360 153	523 3	345 151	3,037 220			
Totals	Totals	197,500	85,424	15,214	100,638	380	20	113	513	526	496	3,257			

(1)—Estimated distribution by regions. Estimates for Labrador have been included under Eastern Region and in totals for Indians and Eskimos.

(2)—Repeats included with first vaccinations.



## HEALTH SERVICES DIRECTORATE

### INTRODUCTION

Activities of particular interest in which members of the directorate staff have participated include the studies of the National Technical Advisory Committee on live poliomyelitis vaccines; co-operation in the International Red Cross program in Morocco for the rehabilitation of persons affected with paralysis following consumption of inedible oil intended for flushing airplane engines; collaboration with officials of the Quebec Provincial Health Department in the introduction of a government-sponsored plan for prepaid hospital care in that province; assistance in the establishment, under the terms of a federal-provincial agreement, of the Institute of Industrial Health and Air Pollution at the University of Montreal. An extensive on-the-spot study of the health services of Australia and New Zealand, by the Director of Health Services, was under way during the last month of the fiscal year.

The Dominion Council of Health advises the Minister on matters relating to the health of the people of Canada. It also plays a co-ordinating role in respect to the health programs of the provinces and between the federal and provincial health authorities.

The Council met twice during the past fiscal year. Subjects considered during the meetings included the activities of the National Technical Advisory Committee on Live Poliomyelitis Vaccines, the re-organization of the Council's Research Advisory Committee, the illegal sale and distribution of certain prescription drugs, the organization of the first Conference of Provincial Nursing Directors, and the inauguration by the Canadian Public Health Association of a Consultant Advisory Service to assist local and provincial departments of health and others working in public health and related areas.

### ENVIRONMENTAL HEALTH AND SPECIAL PROJECTS

During 1960-61 considerable time was devoted to the radiation protection aspect of the unit's environmental health responsibilities. Over-all direction of the Radiation Protection Division was provided by the Principal Medical Officer during the period, pending the appointment of a chief to the division. In addition, the Principal Medical Officer served as the Canadian representative on the United Nations Scientific Committee on the Effects of Atomic Radiation, as a member of the main commission of the International Commission on Radiological Protection, and as a member of the World Health Organization's Expert Advisory Panel on Ionizing Radiation. A considerable flow of technical information was co-ordinated by the unit between these as well as other international organizations and those Canadian scientific groups concerned with the biological effects of ionizing radiation. The Principal Medical Officer also carried out related responsibilities as the department's representative on the recently established National



Research Council's Associate Committee on Radiation Biology, on the Reactor Safety Advisory Committee and on the interdepartmental Committee on Radio-active Waste Disposal.

During the absence of the Chief of the Medical Rehabilitation and Disability Advisory Service, the Principal Medical Officer assumed the responsibility for direction of the continuing programs of this Service. A similar service was provided to the Emergency Health Services Division for a two month period.

Under special projects, the Principal Medical Officer served as Chairman of the Committee on Physical Fitness and participated in studies concerned with certain aspects of the problems of the aged. In connection with the latter, he was an observer at the White House Conference on Aging held in Washington in January, 1961.

## HEALTH INSURANCE

During the year under review, hospital insurance programs pursuant to agreements in accordance with the Hospital Insurance and Diagnostic Services Act, were commenced on April 1, 1960, in the Northwest Territories; on July 1, 1960, in the Yukon; and on January 1, 1961, in Quebec. In addition, a number of changes were made in the programs of some of the other participating provinces.

The new programs in the three jurisdictions mentioned above, are all based on a non-premium system of financing the provincial share of costs. With the exception of an authorized charge of \$1.50 per day in the Northwest Territories, all of the provincial share of costs is met from the general revenues of the government concerned. The two Territories provide emergency out-patient services in case of accidents but the Quebec program, in its initial stage, provides in-patient services only.

There is a three-month waiting period for benefits in all of the three new programs and out-of-province benefits during a period of twelve months continuous absence are provided for in both territorial programs. The Quebec program provides out-of-province benefits in approved hospitals.

Among the changes which have taken place in other programs were the extension of the British Columbia program to include a number of hospitals for the provision of chronic, rehabilitation and convalescent care and the extension of the chronic care program in Alberta to include certain approved nursing homes. The premium charges in Saskatchewan and in Manitoba were increased during the year and the premium system initially used in New Brunswick, was completely eliminated. The New Brunswick provincial share of costs is now derived from general revenue. The rate of the hospitalization tax in Nova Scotia was increased during the year.

With the commencement of the hospital insurance program in Quebec all jurisdictions in Canada were making available to residents the benefits of the hospital insurance and diagnostic services program. Although the scope of out-patient services varied considerably from province to province, all residents of every province in the country were eligible for or entitled to in-patient services as



set out in the Hospital Insurance and Diagnostic Services Act. By March 31, 1961, 17,673,144 persons were covered by the program.

Advance payments to the provinces were maintained on a regular monthly basis and, in addition, financial settlement was made with the Province of Manitoba for the 1958 calendar year. Advance payments during the year under review totalled \$189,322,455.54.

The settlement of the 1958 final contribution to Manitoba amounted to \$46,047.93, making total payments during the 1960-61 fiscal year \$189,368,503.47. The total amount paid to all participating provinces since the inception of the hospital insurance program on July 1, 1958, was \$394,670,423.28. The total payments to each province are shown by fiscal year in the following table.

TABLE 5

TOTAL PAYMENTS MADE BY CANADA TO PARTICIPATING PROVINCES, UNDER THE HOSPITAL INSURANCE AND DIAGNOSTIC SERVICES ACT, BY PROVINCE

Province	Fiscal Year			Total payments from July 1, 1958 to March 31, 1961
	1958-59	1959-60	1960-61	
Newfoundland.....	\$ 2,857,886.84	\$ 4,707,692.94	\$ 5,094,934.21	\$ 12,660,513.99
Prince Edward Island.....		447,338.27	1,010,806.54	1,458,144.81
Nova Scotia.....	1,572,782.64	8,162,540.78	9,595,387.52	19,330,710.94
New Brunswick.....		4,575,374.90	7,914,412.71	12,489,787.61
Quebec.....			13,936,740.72	13,936,740.72
Ontario.....	13,140,213.12	71,892,833.66	84,484,271.86	169,517,318.64
Manitoba.....	7,148,534.97	11,324,466.35	13,048,916.19	31,521,917.51
Saskatchewan.....	8,430,441.93	13,378,379.43	14,453,463.99	36,262,285.35
Alberta.....	8,744,575.68	15,698,727.86	16,905,597.57	41,378,901.11
British Columbia.....	12,784,038.88	20,406,091.56	22,493,438.52	55,683,568.96
Yukon.....			168,683.75	168,683.75
Northwest Territories.....			261,849.89	261,849.89
Totals.....	\$ 54,708,474.06	\$ 150,593,445.75	\$ 189,368,503.47	\$ 394,670,423.28

The Advisory Committee on Hospital Insurance and Diagnostic Services, its sub-committees and working parties, all met during the year under review. Meetings of the two Sub-committees on Finance and Accounting and on Residence and Uniformity of Benefits, were held in Ottawa in June and the Sub-committee on Quality of Care, Research and Statistics met in August prior to a meeting of the Advisory Committee itself. Working parties set up by the Sub-committees held meetings in Ottawa on a number of occasions during the year under review.

Among the various items dealt with by the Advisory Committee through its related sub-committees and working parties, was one designed to achieve a standard form of hospital morbidity so that this data would be comparable as between provinces. Another working party was set up with a view to establishing indices of hospital standards. A variety of technical problems were also dealt with by the sub-committees.

The initiation of the hospital insurance program in Quebec placed a particularly heavy burden on the Health Insurance staff who, along with members of other divisions in the department, gave technical assistance at the request of the



provincial authority in Quebec. Technical assistance was also provided to other participating provinces, particularly by the Consultant in Hospital Accounting, upon whom heavy demands were made.

Health Insurance continued to provide information to other departments in the Federal Government and to a wide variety of organizations and individual members of the public.

After almost three years of operation, the hospital insurance and diagnostic services program may be said to have met with very considerable approval throughout the country.

## INTERNATIONAL HEALTH

The International Health Section is responsible for certain defined functions in international health areas and for the co-ordination of all such interests and activities of the department. It is primarily concerned with those arising out of Canada's membership in the United Nations' Specialized Agencies, i.e., the World Health Organization and other U.N. organs, and the health content of multilateral U.N. technical assistance programs such as the Expanded Program (UNTA) and the children's Fund (UNICEF). Additionally, the section advises the External Aid Office on requests for assistance in the health field and acts as the assessment and placement agency for Colombo Plan and other medical trainees seeking post-graduate study or advanced training at Canadian medical schools and other centres.

In the World Health Organization, the Health Assembly which meets annually is the senior executive body. Its 13th session was held in Geneva May 3 to 20, 1960. The Canadian Delegation was headed by Dr. G. D. W. Cameron, Deputy Minister of National Health, with Mr. M. Wershof, Ambassador and Canadian Permanent Representative to the European Office of the United Nations in Geneva, as alternate head. Other members were Dr. W. Gordon Brown, Deputy Minister of Health for the Province of Ontario, and Dr. B. D. B. Layton, Principal Medical Officer, International Health. Mr. Pierre Dumas, First Secretary and Mr. R. M. Tait, Second Secretary, Permanent Mission in Geneva, were advisers to the delegation.

A wide range of items of major importance in international health were considered by the assembly. A total effective working budget for the regular program of the World Health Organization for 1961 was approved in the amount of U.S. \$18,975,354, of which Canada's share is \$539,240. The Organization is also responsible for the co-ordination and technical direction of health programs financed by the United Nations Expanded Program of Technical Assistance and the United Nations Children's Fund. The total expected to be available for health activities from these sources in 1961, with funds for malaria eradication, special contributions in the Region for the Americas under the Pan American Health Organization and other sources amounts to an estimated U.S. \$58 million.

One of the more important agenda items was the financing of the WHO malaria eradication program in 1961 and thenceforth, until it has achieved its objective. This world-wide endeavour has been supported since its initiation solely by voluntary contributions which have been sought from all possible sources,



including governments, industry, private organizations and individuals, but its financial picture has been extremely precarious. The Director-General was authorized by the Assembly to study ways and means by which the program could be financed in a more dependable and satisfactory manner, including the absorption of all or part of its cost into the regular annual budget of WHO. He was requested to present his proposals at the next World Health Assembly in 1961.

In the field of communicable diseases emphasis was placed by WHO on the creation or strengthening of national epidemiological services and of relevant public health laboratory and statistical services. Progress was reported in the eradication of smallpox in South-East Asia, where pilot programs were begun. Work continued in the field of environmental sanitation, emphasizing the training of sanitary engineers and sanitarians, and on providing safe water supply and waste disposal. WHO continues to regard its fellowships program as one of the most efficient means of training national health personnel. From December 1, 1959, to August 31, 1960, WHO awarded 1,006 fellowships to applicants from 122 member countries. The assembly also reviewed a study of an intensified medical research program prepared by the Director-General and adopted his plan for fostering international medical research. A sum of \$500,000 was included in the regular budget for this purpose.

New members admitted included Cameroun, Kuwait and Togo, while associate membership was accorded to Cyprus, the Republic of the Congo (Brazzaville), Ivory Coast, Niger, Upper Volta, Central African Republic, Mali and Gabon. The assembly also approved, in principle, the establishment of official relationships between the headquarters of WHO and the League of Arab States.

It is unprecedented to report on two World Health Assemblies taking place within the one fiscal year, but on the invitation of the Government of India, the Fourteenth World Health Assembly was held in New Delhi, India, and the date of its opening was advanced to February 7, 1961, the meeting lasting until February 24th. Canada was represented by a six-member delegation, the Chief Delegate being Dr. G. D. W. Cameron and the Alternate Chief Delegate Mr. C. A. Ronning, High Commissioner for Canada in India. Other members of the delegation were Dr. P. E. Moore, Director of Indian and Northern Health Services, Dr. Jean Gregoire, Deputy Minister of Health, Province of Quebec, and Dr. B. D. B. Layton, Principal Medical Officer, International Health. Mr. G. L. Morris, Office of the High Commissioner for Canada in India, acted as Adviser.

Among the more noteworthy agenda items were the program and budget estimates for 1962, which will provide a total effective working budget of \$23,607,180, Canada's assessment being U.S. \$680,980, and the formula which was evolved for the continued financing of the malaria eradication program. The budget represented an increase of some 19.3 per cent as compared with the previous year's amended total. More than half of this increase was due to the inclusion of the \$2 million for malaria eradication for 1962 and this will recur during the following two years, but will, subsequently, place the malaria program on a sound and stable financial basis. As previously noted, WHO has a co-ordinating responsibility with respect to funds from other agencies and the anticipated total from all sources for 1962 is estimated in excess of \$54 million.



The most dramatic activity of WHO reported at the assembly was the assistance provided during 1960 to the Republic of the Congo (Leopoldville), to meet as rapidly as possible the grave health problems of this newly independent country. This consisted mainly of services for environmental sanitation and the control of endemo-epidemic diseases. WHO was also able to work out a program for training and education of Congolese medical and para-medical personnel, at the same time recruiting foreign personnel necessary in the first instance to staff basic health services in that country.

Other items of significance were the protection of mankind against radiation hazards, the granting of independence to colonial countries as related to WHO, and the ratification of the agreement between WHO and the League of Arab States. Unfortunately, political overtones were injected into these and other discussions, distorting the scientific tone and the emotional reaction of the participants.

In addition to the eight associate members which were admitted during 1960 becoming full members in the Organization, Chad, Dahomey, Mauritania, Nigeria, Senegal, Somalia and the Malagasy Republic attained full membership, with Ruanda Urundi and Tanganyika being accorded associate status. This brought the total membership, at the conclusion of the Assembly, to 108, four of these being associates.

Prior to and at the conclusion of the assembly, members of the delegation took advantage of the opportunity to visit and discuss, personally, with senior health personnel in a number of the Colombo Plan countries in South-East Asia, problems and health projects in which Canada could provide advice and assistance. These included Pakistan, India, Burma, Thailand, Malaya, and the Philippines, with brief stops in Hong Kong and Japan. The knowledge and first-hand observation and experience acquired during these visits has proved of inestimable value in the continuing routine activities under the External Aid (Colombo Plan) Fellowships and Capital Assistance Programmes in the health field.

The progressive increase in the numbers of Colombo Plan medical trainees coming to Canada has been most gratifying, the total for the year having, for the first time, exceeded 100 scholars in various health disciplines.

The Principal Medical Officer, International Health, attended the annual meeting of the Directing Council, Pan American Health Organization (Regional Committee of WHO for the Americas) held in Havana, Cuba, August 14 to 26, 1960. As heretofore, his status was that of Canadian Observer at this meeting. He also represented the department at the first Mexican Public Health Congress held in Mexico City December 3 to 9, 1960, and was accorded the honour of presiding at one of the plenary sessions with the Under-Secretary of Health of the Ministry of Health and Welfare of Mexico.

## NATIONAL HEALTH GRANTS ADMINISTRATION

During the fiscal years 1958-59 and 1959-60 studies were carried out to determine what changes, if any, might be required in the structure of the National Health Program to meet new challenges and changing emphases in public health and to adjust to the gradual expansion of a nation-wide program of hospital insurance.



These studies culminated on April 1, 1960, in a reduction in the number of categories of grants from twelve to nine and in a substantial number of changes in the amounts of money allotted to the individual grants, without however, any marked change in the total amount of money available to the provinces in the program as a whole.

### **Changes in the Grants**

The Laboratory and Radiological Services Grant, begun in 1953-54, was discontinued as most of the services formerly financed through it had been accepted as part of the Dominion-provincial hospital insurance program. Another grant discontinued was that for Venereal Disease Control which had operated in one form or another almost continuously since 1919.

To provide funds for continuing assistance with a venereal disease control program, for projects formerly supported under the Laboratory and Radiological Services Grant but not absorbed by hospital insurance and to provide for new and desirable developments in public health programs, the General Public Health Grant was increased in size. Formerly it had been calculated at 50 cents per capita; this was raised to 80 cents per capita. Increases in population will, of course, be reflected in a larger grant in future years.

The third grant to be abolished as a separate entity was the Crippled Children Grant which had been in operation since 1948. It was merged with the Medical Rehabilitation Grant in a combined grant known as the Medical Rehabilitation and Crippled Children Grant. The total of the two grants was formerly \$1,516,300. The total for the new combined grant was raised to \$2,625,000 so that substantially larger sums are now available to the provinces for the development and extension of programs of medical rehabilitation for both children and adults.

In view of the drop in the death rate from tuberculosis and a modest decline in its incidence, the Tuberculosis Control Grant was reduced from \$4,226,000 to \$3,500,000. Also reduced was the Child and Maternal Health Grant which had been set up in 1953-54 but never fully utilized by all the provinces. The reduction in this grant was \$250,000—from \$2,000,000 to \$1,750,000. The third grant reduced in size was that for Cancer Control which was cut from \$3,592,600 to an even \$3,500,000.

On the other hand, four grants were increased to meet the apparent need for a more intensive effort in their fields of responsibility. In addition to the General Public Health Grant already mentioned, the Mental Health Grant was increased from \$7,218,516 to \$8,765,391; the Professional Training Grant from \$516,300 to \$1,744,200 and the Public Health Research Grant from \$512,900 to \$1,744,200. It was further provided that both the Professional Training and the Public Health Research Grants should be calculated each year on the basis of 10 cents per capita so that increases in population will automatically increase the amounts available to the provinces for the training of public health workers and for the discovery of new knowledge through research.

The terms of the Hospital Construction Grant remained unchanged.



The decrease in the number of categories of grants and the changes in amounts resulted in a modest increase—approximately \$394,000—in the amount of money available to the provinces through the program as a whole as compared with 1959-60.

### **Provincial Co-operation**

During the year meetings were held in Ottawa to discuss with each province its plans for the utilization of its health grant funds, and from time to time during the year officers of the administration visited most of the provinces for further discussions and to see specific projects in action. Several meetings were held with representatives of Quebec prior to the introduction of hospital insurance in that province on January 1, 1961. These meetings, like those held previously with other provinces, were designed to review all projects in any way involving hospitals so that there would be no duplication of federal assistance under the National Health Program and the hospital insurance arrangement.

### **Expenditures**

Despite the changes occasioned by the further development of hospital insurance, the percentage of utilization of each of the grants remained at a high level. Federal expenditures under the program continued to rise and totalled \$47,993,355 during the 1960-61 fiscal year—an increase of approximately \$1,995,945 over 1959-60. Federal payments to the provinces and territories since the program began on April 1, 1948, now total more than \$398,821,820.

TABLE 6  
EXPENDITURES UNDER THE NATIONAL HEALTH GRANTS FOR THE FISCAL YEAR 1960-61 BY PROVINCE AND GRANT

Province	GRANT										Total
	Professional Training	Hospital Construction	Mental Health	Tuberculosis Control	Public Health Research	General Public Health	Cancer Control	Medical Rehabilitation and Crippled Children	Child and Maternal Health		
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Newfoundland.....	43,164	71,350	209,867	125,912	.....	327,024	22,745	24,507	20,447	845,016	
Prince Edward Island.....	1,566	169,579	98,625	28,897	.....	123,077	12,438	9,168	3,972	447,322	
Nova Scotia.....	74,055	1,322,765	371,999	146,292	47,844	751,341	42,224	46,871	71,781	2,875,172	
New Brunswick.....	71,657	396,529	312,763	157,527	—	461,176	62,403	77,537	42,180	1,581,772	
Quebec.....	282,901	4,955,941	2,416,796	1,274,287	594,158	2,635,733	915,484	367,161	557,858	14,000,319	
Ontario.....	501,120	6,998,643	2,621,818	785,534	577,887	2,617,187	1,038,528	225,702	388,290	15,754,709	
Manitoba.....	77,414	1,200,971	405,944	176,846	44,280	703,816	181,185	131,098	74,186	2,995,740	
Saskatchewan.....	64,514	803,333	395,567	151,035	49,496	674,678	185,656	81,517	80,096	2,485,892	
Alberta.....	106,507	322,083	631,253	210,975	81,930	986,049	252,063	85,744	71,722	2,748,326	
British Columbia.....	65,262	1,354,008	656,220	285,626	63,234	1,191,803	304,676	109,403	112,644	4,142,876	
Northwest Territories.....	2,315	.....	.....	11,650	7,686	49,303	3,047	496	.....	74,497	
Yukon.....	.....	.....	20,000	21,714	.....	.....	.....	.....	.....	41,714	
All Provinces.....	1,290,475	17,595,202	8,140,852	3,376,295	1,466,515	10,521,187	3,020,449	1,159,204	1,423,176	47,993,355	



## RESEARCH DEVELOPMENT

The Research Development Section was separated in 1960 from the International Health Section, each being now under the direction of a Principal Medical Officer. The section co-ordinates all aspects of the department's medical research programs, both within the department and in relations with other Federal Government and national voluntary agencies. Studies are conducted and recommendations made on the emphasis and direction which the department's research activities should be given in order to achieve improvement in the health services available to the Canadian people. These health services now include a wide range of clinical projects, diagnostic procedures, hospital operations, treatment of disease, and rehabilitation efforts.

During the fiscal year 1960-61, a total of \$5,161,453 was made available for scientific research within the department and for extra-mural grants-in-aid of medical research.

The intra-departmental research activities were allocated \$1,678,000, as indicated in Table 7. This also includes the Research and Statistics Division whose activities are concentrated in the socio-economic field. Detailed reference to the work performed in this and the other divisions listed is made in relevant sections of the report.

The National Health Grants Program supports research under several separate grants. The Public Health Research Grant was re-organized in 1960 to make available 10 cents per head of population, or currently about \$1,700,000 annually. Other grants, which are allocated to provinces in specified amounts and conditions for various services may also assist research. The most extensive such assistance to research is given under the Mental Health and Child and Maternal Health Grants. Prior to 1960-61 research assistance under some grants (e.g. Cancer Control) had to be matched by provincial funds but this is no longer required. From all grants the total allocation in 1960-61 was \$3,483,453. Additional assistance has also been given to universities, hospitals and research institutes in the form of equipment, training of staff, etc.

Allocations for extra-mural grants-in-aid by grant and by province are presented in Table 8. The funds for the Ontario Cancer Treatment and Research Foundation are matched with an equal contribution by the province but the research contribution by each province to the National Cancer Institute was this year not required to be matched.

An analysis of fields of medicine or scientific disciplines involved in the extra-mural research program is presented in Table 9, indicating the numbers of projects and the funds allocated to the specific field. Similarly, the disease entities in the research studies have been reviewed and are listed in Table 10.

TABLE 7

## SUMMARY OF INTRA-MURAL RESEARCH PROGRAM

Department of National Health and Welfare—1960-61

<i>Division</i>	<i>Research Budget Forecast</i>
Civil Aviation Medicine .....	\$ 3,000
Dental Health .....	20,000
Epidemiology .....	30,000
Food and Drugs Laboratories .....	520,000
Laboratory of Hygiene .....	420,000
Nutrition .....	30,000
Occupational Health .....	215,000
Public Health Engineering .....	10,000
Radiation Protection .....	130,000
Research and Statistics .....	300,000
	<hr/>
	\$ 1,678,000



TABLE 8  
ALLOCATIONS FOR RESEARCH UNDER THE NATIONAL HEALTH GRANTS PROGRAM—1960-61

Province	Mental Health	Tuberculosis	Public Health Research	General Public Health	Crippled Children and Medical Rehabilitation	Child and Maternal Health	Total
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Newfoundland				2,700 00			2,700 00
Nova Scotia	26,094 50		56,045 00	1,800 00		10,260 00	94,199 50
Quebec	344,561 54		595,357 61	197,585 00	19,360 10	166,091 00	1,322,955 25
Ontario	288,675 59	73,212 00	658,466 07		31,899 35	247,466 41	1,239,719 42
Manitoba	44,357 46		51,561 00			23,643 00	119,561 46
Saskatchewan	78,437 26		62,522 92			26,641 65	167,601 83
Alberta			89,348 97			6,840 00	96,188 97
British Columbia	75,382 96		65,256 00			48,180 47	188,819 43
Northwest Territories			8,300 00				8,300 00
Total	797,509 31	73,212 00	1,586,857 57	202,085 00	51,259 45	529,122 53	3,240,045 86

Note—Assistance to National Cancer Institute: Nfld. \$20,000 00 N.S. \$15,000 00 N.B. \$12,489.70  
P.E.I. 739.00 Quebec 36,209.60 Ontario 40,918.50  
Manitoba 6,500.00

—Assistance to Ontario Cancer Treatment and Research Foundation

Total \$131,856.80  
111,551.00

TABLE 9  
RESEARCH ACCORDING TO FIELD OF MEDICINE—1960-61

Field of Medicine	No. of Projects	Amount	Per Cent of Total
Cardiology.....	21	\$ 408,064.48	12.6
Psychology and Psychiatry.....	23	294,666.60	9.1
Biochemistry.....	29	265,873.54	8.2
Bacteriology.....	36	230,624.42	7.1
Virology.....	14	324,955.18	10.0
Pediatrics.....	18	185,573.21	5.7
Neurology.....	9	119,283.55	3.7
Pathology.....	14	117,407.77	3.6
Special Senses.....	10	114,496.91	3.5
Obstetrics and Gynaecology.....	7	109,430.50	3.4
Hematology.....	9	99,522.03	3.1
Tuberculosis.....	2	88,797.00	2.7
Physiology.....	9	87,642.00	2.7
Pharmacology and Therapeutics.....	8	81,674.70	2.5
Endocrinology.....	7	74,984.00	2.3
Internal Medicine.....	4	73,586.60	2.3
Tubercle Bacillus and BCG.....	6	50,364.16	1.6
Genetics.....	3	37,548.18	1.2
Dentistry.....	3	34,611.95	1.1
Other—Miscellaneous.....	42	440,939.08	13.6
Total.....	274	\$3,240,045.86	100.0

TABLE 10  
RESEARCH ACCORDING TO DISEASE ENTITY—1960-61

Disease Entity	No. of Projects	Amount	Per Cent of Total
Infectious Disease.....	35	\$ 454,800.96	14.0
Psychosis.....	29	420,205.46	13.0
Heart Disease.....	19	404,659.46	12.5
Neonatal Period.....	17	192,961.62	6.0
Nervous System.....	15	156,230.46	4.8
Other Respiratory.....	11	134,432.83	4.2
Tuberculosis (Respiratory).....	14	120,717.20	3.7
Eye, Ear and Mastoid.....	10	114,496.91	3.5
Pregnancy.....	9	94,704.43	2.9
Mental Deficiency.....	11	89,372.76	2.8
Senility.....	5	88,023.18	2.7
Arteriosclerosis and Hypertension.....	8	77,762.00	2.4
Anemias.....	5	65,360.00	2.0
Digestive Disease.....	5	63,281.65	2.0
Poisoning, Alcoholism etc.....	5	59,907.00	1.8
Neurosis and Psychoneurosis.....	5	52,685.00	1.6
Bones & Organs of Movement.....	6	48,976.12	1.5
Genito-Urinary System and V.D.....	4	35,594.00	1.1
Mouth and Teeth.....	3	34,611.95	1.1
Other—Miscellaneous.....	20	228,120.29	7.0
Unclassifiable*.....	38	303,142.58	9.4
Total.....	274	\$3,240,045.86	100.0

\*No specific disease involved.



## SPECIAL HEALTH SERVICES

### BLINDNESS CONTROL DIVISION

The larger proportion of the division's work relates to Blind Persons Allowances provided under the Blind Persons Act. Other responsibilities are the Treatment Plan for restoring vision to recipients of Blindness Allowances and participation in Health Grants Projects concerned with vision.



The Blindness Control Division issues blindness certificates to provincial authorities who administer blindness allowances. The division maintains a roster of oculists who examine applicants for the allowance and, if necessary, re-examine recipients. In addition, the division administers a sight-restoration plan.

#### ***Blindness Allowances***

Certificates of blindness are issued to the provincial authorities who handle the administration of Blindness Allowances. A total of 1,807 eye examination reports were reviewed and rulings made on eligibility for Blindness Allowances. Some 8,000 reports from provincial field workers were also reviewed.



At the beginning of the year there were 8,671 persons between the ages of 18 and 70 receiving Blindness Allowances, among the 23,800 registered blind in Canada. During March, 1961, the number receiving the allowance was 8,647, one hundred less than two years ago.

During the year the definition of blindness in the regulations to the Blind Persons Act was altered to permit a more consistent appraisal of visual field defects without changing the actual standard of blindness as defined previously.

### **Treatment Plan**

Treatment was completed for 105 cases during the current year, the same number as in the preceding year. Of the cases treated, eight were corneal transplant operations with a successful result in four cases. Successful cases in the following table are those in whom vision, following treatment, was better than 20/200 and who were therefore no longer blind under the Act. Many of the cases considered unsuccessful nevertheless obtained substantial improvement in guiding vision.

TABLE 11  
TREATMENT CASES

Year	Treated	Successful	Unsuccessful
1954-55 .....	53	44 (83%)	9 (17%)
1955-56 .....	83	62 (75%)	21 (25%)
1956-57 .....	54	44 (81%)	10 (19%)
1957-58 .....	94	68 (72%)	26 (28%)
1958-59 .....	88	72 (82%)	16 (18%)
1959-60 .....	105	88 (84%)	17 (16%)
1960-61 .....	105	80 (76%)	25 (24%)

Since the inception of the Treatment Plan, 731 cases have been treated, 562 (or 77%) successfully. The distribution of treatment cases among the various provinces is shown in the following table.

TABLE 12

	This Year	Since 1948
Newfoundland .....	4	9
Prince Edward Island .....	0	3
Nova Scotia .....	5	35
New Brunswick .....	12	111
Quebec .....	60	361
Ontario .....	17	171
Manitoba .....	5	19
Saskatchewan .....	2	22
<b>TOTAL</b> .....	<b>105</b>	<b>731</b>



With the extension of Hospital Insurance Agreements across Canada, there has been a steady decrease in the direct cost of treatment per case. The federal share of cost per case for the current year was under \$300, considerably less than the cost of one year's Blindness Allowance.

### **Health Grants Projects**

- (a) *Glaucoma Clinics.* With the inception of another glaucoma clinic during the year, these clinics are now operating with Health Grants assistance in Saint John, N.B., Halifax, Quebec City, Montreal (3 clinics), Sherbrooke, Chicoutimi, Toronto, Ottawa, London, Winnipeg, Saskatoon and Victoria. Glaucoma research projects are being carried on in conjunction with some of these clinics, and the sphere of activity of some of the clinics has been broadened to provide consulting service to wide areas.
- (b) *Eye Research.* Support has been continued under the Health Grants Program to projects in basic and clinical research in the field of ophthalmology. Research work was continued on glaucoma, diabetic retinopathy, retinal detachment, corneal tissue and transplant studies, vascular hypertension effects and strabismus.
- (c) Other projects supported under the Health Grants Program included children's eye clinics, visual screening of school children, a low vision clinic, orthoptic services and short-training courses for technical personnel in these fields.

### **Educational Material**

The division co-operated with the Information Services Division in the preparation of two radio scripts dealing with vision problems, "Sight Sneak" and "Eyes in the Little Red School House".

Two pamphlets "Eye Trouble" and "Sharp Eyes for Teenagers" were reprinted and are being widely distributed through the provincial information officers.

### **Publications**

The field study of aniridia occurring in a Canadian community was completed during the preceding year. A review of the clinical, genetic and statistical aspects of the study was published in the Archives of Ophthalmology.

A paper on Glaucoma Control in Canada was published in the Canadian Journal of Public Health.

1. "A Family Study of Aniridia", J. H. Grove, M.D., Margery W. Shaw, M.D., Gabrielle Bourque, B.A., Archives of Ophthalmology, January, 1961: vol. 65.
2. "Glaucoma Control", O. Hoffman, M.D., Canadian Journal of Public Health, January, 1961: vol. 62.



## CHILD AND MATERNAL HEALTH DIVISION

The Child and Maternal Health Division is concerned with the improvement and maintenance of health of mothers and children throughout Canada.

In keeping with the general policy of the Health Branch, close co-operation and liaison exist with provincial health departments, specifically with Maternal and Child Health Divisions and with the divisions of Public Health Nursing. In addition, continuous planning and development are carried out through the division's Maternal and Child Health Advisory Committee, its three sub-committees, Research, Standards of Care and Statistics. Co-operation with other health groups and professional organizations continued and intensified as specific health problems received emphasis.

Because of the complexity of its broad objective, reaching out as it does to large segments of the population including the handicapped, the division's interests are manifold. Activities are directed toward the stimulation, development, extension and co-ordination of comprehensive health programs and services for mothers and children of all ages and their families.

### **A Young Population**

It is significant to our program in our growing country with a 1959 population of 17,442,000 that 5,821,000 or one third are under the age of fifteen. Disregarding the 1,870,000 who are over the age of 60, we have another segment of about 9,750,800 people, many of whom are mothers and fathers. In addition, the immigrant population continues to swell the numbers in the age groups which are our chief concern.

### **Infant Mortality**

Of some encouragement is the slow but steady decline in infant mortality over the last several decades. For the first time in history the figure dropped below 30. In 1959 the infant mortality rate was 28M. Out of 479,275 live births 13,595 infants died in their first year and about 8,841 died in the first four weeks of life.

Health workers must continue to strive for further reduction in infant deaths. Our infant mortality rate would be expected to compare more favourably with those of other countries of similar standards of living, 10 of which have lower infant death rates than our own. The five main causes of death in order of importance are immaturity, congenital malformation, pneumonia, asphyxia and birth injury.

### **Maternal Deaths**

In 1959 there were 263 deaths of mothers in Canada, a rate of 50 per 100,000 live births. The main causes were haemorrhage, sepsis and toxemia.

Continuous analyses of mortality and morbidity data of mothers and children help to give a degree of specificity to health problems and to highlight areas requiring research, service and education.



### **Consultative Service**

During the year visits were made to four provincial health departments by the Chief and the Medical Consultant. The Nursing Consultant visited 6 provinces for discussion of maternal and child health nursing programs. Provincial visits include observation and discussion of provincial health programs, and the use of health grant funds for research, service and professional training.

### **Health Grants Program**

Commencing on April 1, 1960, the Child and Maternal Health Grant was reduced from \$2,000,000 to \$1,750,000. This change was based on the assumption that many services would be taken over on a shareable insured basis in the Hospital Insurance Program.

Requests for grant assistance to improve or extend maternal and child health programs continue to be high (see Table 13). Project applications are reviewed by the division and where necessary are referred to other departmental consultants.

Child and Maternal Health Grant funds assist in the support of a number of provincial maternal and child health consultant services, as well as the professional training of provincial consultants. Examples of services being assisted are pre-natal teaching and care, hearing tests in schools, dental programs, genetic counselling, rehabilitation programs for hearing and speech problems. An important field of utilization is for professional training, short or long term, in many areas of maternal and child care. Funds may be used to pay the costs of providing short courses or institutes; they also may provide bursaries to individuals for travel, tuition, and maintenance.

A significant proportion of the Child and Maternal Health Grant is being used for research. Some of the research projects relate to maternal health; some relate to the newborn. A number of projects on maternal and child health are supported by the Public Health Research Grant. This year the division and its sub-committee on research co-operated with Research Development in the appraisal of these projects.

### **Educational Materials**

Provincial Maternal and Child Health Divisions assisted the division in setting up a priority program for the production of health education materials. Continuous consultation with provincial workers exists in the preparation and revision of publications. Our best known book "Canadian Mother and Child" continues to claim a high proportion of the available funds. This book is presently undergoing a major revision. The delivery of our newest booklet "The Application of the Principles of Medical Asepsis to Maternity and Newborn Care" raises to three the number of items directed to professional workers. Booklets and pamphlets prepared for various segments of the lay public total ten,—posters five. Eight booklets and three posters were reproduced. The companion pamphlet and poster on immunization have been redone and will be available early next year. A film entitled "The New Baby" has just been completed and will soon be available in French and English.



### Field Research

The need for study of programs, facilities and procedures currently in practice has long been felt, in order to complement the clinical research being supported by health grant funds. Our present "Survey of Maternal and Newborn Care in 200 Canadian Hospitals" is nearing completion. The information sent in by the provincial health departments will be used as a basis for the development of a Standard for Maternal and Newborn Care in Hospitals For Use in Canada.

### Advisory Committee

At its third annual meeting, the Maternal and Child Health Advisory Committee discussed activities of its three sub-committees, provincial programs, the need and value of our health education materials, health grants, poison control programs, rooming in, breast feeding, and scurvy as a public health problem. The following will give some indication of the activities of the sub-committees:

(1) *Sub-Committee on Research*—This year 63 research projects under the Child and Maternal Health Grant were considered and recommendations for support amounted to one half million dollars.

(2) *Sub-Committee on Standards of Care*—Our field research "The Survey of Maternal and Newborn Care in Hospitals" is the outgrowth of a recommendation of this group. The preparation of a report of survey findings will occupy some months.

(3) *Sub-Committee on Statistics*—Proposed definitions and formulae used in survey and studies of perinatal mortality in Canada are currently being revised which may lead to more comparability of findings among researchers. A working party of this sub-committee is engaged in a study of classification of causes of perinatal morbidity and mortality.

TABLE 13  
EXPENDITURE OF NATIONAL HEALTH GRANTS  
1953-1961

Child and Maternal Health Grant	Funds Available	Funds Expended	Per Cent Expended
Year			
1953-54.....	\$ 500,000	\$ 114,341	23
1954-55.....	1,000,000	560,385	56
1955-56.....	2,000,000	1,009,408	50
1956-57.....	2,000,000	993,277	50
1957-58.....	2,000,000	1,165,550	58
1958-59.....	2,000,000	1,700,420	85
1959-60.....	2,000,000	1,842,161	92
1960-61(a).....	1,750,000	1,330,000	76

(a) Preliminary figures.



## DENTAL HEALTH DIVISION

The activities of this division are directed to the prevention and control, chiefly in children, of tooth decay, malocclusion and periodontal disease. It is, however, concerned with the oral health of adults, more particularly the epidemiology and the prevention of periodontal disease.

The lack of adequate preventive dental measures has led the division to concentrate its efforts upon doing and encouraging related research. The dependence of oral health upon sound food habits and oral cleanliness has led to an active interest in expanding dental health education. The third major activity of the division consists in providing technical consultative and liaison services to the provincial departments of health, to other divisions of the department, to universities and to dental organizations within and beyond Canada.

### **Research**

1. This year additional data were obtained on the dental effects of water-borne fluoride. All the native children of Brantford, Sarnia and Stratford, who will be at least 14 years of age but still under their 17th birthday on June 30th 1961, were dentally examined and their caries status recorded. This involved a total of about 1,700 examinations. The data obtained will be statistically analyzed and reported upon during the next fiscal year.

2. A study of the dental effects of a topically applied 8 per cent solution of stannous fluoride is now in its second year. This study involves about 1,200 children.

3. In order to assist the Canadian Dental Association to furnish a comprehensive report to the Canadian Conference on Children 1960, the division collected data on the dental health of children from all ten provinces and prepared a summary report which was presented to the conference.

### **Health Education**

This division works closely with other divisions of the department whose health education activities are related, with provincial dental divisions and with dental and other voluntary agencies concerned with health education.

This year two new posters, one publication and three radio scripts were produced.

### **Consultative Services**

The division provides consultative services to all divisions throughout the department whose work has some bearing on dental health activities or on the practice of dentistry. Frequent and close collaboration is maintained with Indian and Northern Health Services, Emergency Health Services Division, Food and Drug Directorate, Public Health Engineering Division, Research and Statistics Division, Child and Maternal Health Division, and to a lesser degree with several other divisions.



All the provinces were visited and the grant-aided dental programs and other matters of mutual concern discussed with the provincial dental directors.

Close liaison was maintained with the Canadian Dental Association by representation on the Public Health Committee and on the National Survey Committee of the Association.

### **Other Activities**

A newsletter designed for the exchange of information among people engaged in dental public health work throughout Canada was published quarterly with the assistance of the provincial dental divisions and other interested people.

## **EMERGENCY HEALTH SERVICES DIVISION**

During the year, the basic duties and responsibilities of the division were defined and terms of reference prepared. In addition to the responsibilities previously assigned, the division provides advice on health matters to the Emergency Measures Organization. This includes the co-ordination of civil defence health planning with other NATO nations and in particular joint planning with the United States.

With Cabinet approval, the Minister established an Emergency Health Services Advisory Committee with representation from the national associations of the various health professions and from other federal departments concerned. The Advisory Committee chairman will be the Deputy Minister.

The organization of the division was revised by the creation of a Public Health Section designed to provide the co-ordination of planning, in this important field, for the rehabilitation period as well as for the period of emergency. The loss of the packaging and warehousing services formerly provided by the Department of National Defence at Plouffe Park resulted in a major increase in the staff of the Health Supplies Section.

In nine of the provinces medical officers from other directorates have been appointed as regional Federal Emergency Health Service Officers on a part-time basis and in Paris, a medical officer of the Immigration Medical Service has been accredited as the Canadian representative to the NATO Medical Advisory Committee.

Throughout the year, considerable progress was made in the procurement and packaging of health supplies and the distribution of the national stockpile to regional storage. Of the \$18 million authorized, some \$8 million had been delivered and packaged for long term storage by the end of the fiscal year with an additional \$5 million on order. A rotation plan for the spoilable items in the stockpile has been established. A major achievement was the distribution of the health supplies from the central warehouse to seven regional storage depots operated by the Department of National Defence. Additional depots are under construction or are in process of establishment. A system of pre-positioning Hospital Disaster Kits has been established and an agreement reached with one province on the method of distribution and security for these items.



During the recent disastrous earthquake in Chile, the Cabinet authorized the release of supplies from the stockpile as part of the Canadian contribution.

The information and educational program of the division was expanded in scope and activity. Increased emphasis on public information with the assistance of Information Services resulted in a number of feature articles and the creation of a display on Family Health Planning for Disaster. The number of articles prepared for professional journals increased markedly and the preparation of training manuals was accelerated. Nearly 20,000 lay persons completed courses in home nursing conducted under the auspices of the St. John Ambulance Association and the Canadian Red Cross Society. For selected individuals who complete this training, a 44 hour hospital experience program has been established in some hospitals.

An estimated 30,000 lay persons undertook first aid training conducted with the co-operation of the St. John Ambulance Association which is a major expansion in this project.

The number of health courses conducted at the Civil Defence College increased with a greater number of candidates in attendance. To date, approximately:

- 500 physicians
- 100 dentists
- 500 nurse educators
- 250 nurse specialists
- 300 pharmacists
- 100 veterinarians

have received training in emergency health planning.

The demand for services of the Special Weapons Section increased markedly during the year in line with the general increase in emergency planning in all federal departments. The section has stimulated a number of projects by research agencies.

The division co-operated in the development of planning for re-entry operations and subsequently increased their efforts to stimulate the organization of all health resources at the municipal level to meet emergency situations. In March a conference was held at Arnprior in conjunction with the Canadian Hospital Association and provincial health authorities to investigate the methods of emergency health planning in hospitals and municipalities.

Departmental working parties were established to study and define the essential functions of the Health Branch in emergency government and to propose a suitable organization to carry out these functions.

### EPIDEMIOLOGY DIVISION

The primary functions of the division are epidemiological research, consultation, and technical information.

#### **Lung Cancer Study**

In 1955, the Epidemiology Division and the Research and Statistics Division, together with the Department of Veterans Affairs, undertook a continuing prospective study on the relationship of residence, occupation, and smoking habits to death



from lung cancer and other selected causes among recipients of pensions through the Department of Veterans Affairs. A preliminary report was made in June 1960, entitled "A Canadian Study of Mortality in Relation to Smoking Habits". This was published in the March 1961 issue of the Canadian Journal of Public Health. The study will be terminated and final analysis of the data started in 1961.

### ***Leukemia Study***

In co-operation with a large hospital in Ontario, a follow-up study was begun in 1959 of approximately 2,500 children born in the period 1939-1955 who had been exposed to X-rays during the prenatal period. The object of this study was to determine the possible relationship between X-ray exposure before birth and subsequent development of leukemia or other forms of cancer. A preliminary analysis of the data indicates that in the group studied no excess mortality was caused by irradiation in utero. A report of this study will be prepared in 1961.

### ***Staphylococcal Infections in Hospitals***

The Epidemiology Division is represented on the National Research Council Associate Committee on Control of Hospital Infections whose purpose is to study the problem of hospital infections and to make recommendations concerning control measures. The division assisted the work of this committee by tabulating and analyzing reports of staphylococcal infections from hospitals which are participating in the study. A preliminary report for the first six months was published in 1959, and a report for the full year 1959 has been presented to the Associate Committee. This report will be distributed to the participating hospitals and publication of findings is under consideration.

### ***Survey of Health Unit Services in Canada***

In 1960 an initial survey of local health unit services was undertaken as a combined project of the Epidemiology Division, the Research and Statistics Division and the School of Hygiene of the University of Toronto. Questionnaires were sent out to full-time medical officers of health and 89 per cent responded. A preliminary report of this survey will be presented early in 1961.

Applications for National Health Grants in support of local health services are referred for review to the Epidemiology Division.

### ***Oral Poliovirus Vaccines***

The Epidemiology Division is represented on the National Technical Advisory Committee on Live Poliovirus Vaccines which was established in October 1959. The purpose of this committee is to advise the Dominion Council of Health on all aspects relating to the introduction of live oral poliovirus vaccines in Canada. The use of these vaccines has advanced to the stage of total community feeding demonstrations.



**Paralytic Poliomyelitis**

In 1960, 858 cases of paralytic poliomyelitis were reported to the Epidemiology Division. This was less than half the number reported in the previous year when 1,870 cases were reported. During the year a new system of reporting individual cases of paralytic poliomyelitis was initiated. Preliminary and final forms are completed at the local level and forwarded through the provincial health departments to the Epidemiology Division. This new reporting system, which supplements the telegraphic reports already in existence, has enabled this division to provide current information on poliomyelitis trends.

**Accidents**

The division is active in the accident prevention field and is represented on the Medical Advisory Committee of the Canadian Highway Safety Council, the Canadian Public Health Association Committee on Accident Prevention, and the Canadian Medical Association Committee on Medical Aspects of Traffic Accidents.

**Tuberculosis**

In March 1960, the National Tuberculosis Conference was held in Ottawa. The Epidemiology Division co-operated with the Canadian Tuberculosis Association and the Health and Welfare Division of the Dominion Bureau of Statistics in the planning, conduct and reporting of this conference. As a direct result, a new system of individual case reporting to the Dominion Bureau of Statistics was started in January of 1961.

One of the continuing functions of this division is to review submissions for the allocation of National Tuberculosis Control Grants.

**Venereal Disease**

The division assists provincial health departments in the follow-up of venereal disease contacts when requested. A report prepared by this division is distributed to provincial health departments semi-annually, as well as to other interested agencies, and represents, at this time, the most complete compilation of such figures available for the 10 provinces as well as for 18 of the larger Canadian cities.

Four hundred and sixty-four cases of primary and secondary syphilis were reported in 1960; the average for the three preceding years was 260 cases. The number of gonorrhoea cases reported in 1960 was 15,626, an increase of 858 over the previous year.

Applications for National Cancer Control Grants were referred to the division recommendations made. The lay manual "Venereal Disease—What You Should Know" was revised and printed during the year.

**Chronic Disease**

Members of the Epidemiology Division played an active part on the Departmental Committee on Chronic Disease and on Health Problems of the Aged.



Applications for National Cancer Control Grants were referred to the division for study and recommendations.

### **Communicable Diseases**

Medical assessment was made of current national and international epidemiological reports. Publication of the "Surveillance Reports of Epidemic or Unusual Communicable Diseases" was continued. These reports are distributed to medical officers of health and other professional personnel.

Consultant services have been given by the Epidemiology Division to other divisions and departments in the development of improved communicable disease reporting forms and procedures.

### **Technical Information**

Numerous medical periodicals and reports of an epidemiological and statistical nature from various countries and the World Health Organization are regularly received by this division. Selected articles are indexed, abstracted and filed for ready access. These systems serve several purposes including the answering of many enquiries from both medical and lay individuals.

## **HOSPITAL DESIGN DIVISION**

The Hospital Design Division maintains, at the national level, a consulting and advisory service related to the planning and construction of hospitals and health institutions. This service is intended to supplement provincial and community planning effort and to assist the provincial health departments in maintaining good standards of hospital construction. This division also keeps the suitability of standards upon which Hospital Grants are based under continual review.

### **Hospital Construction Grants**

Plans of every construction project submitted by provincial health departments with applications for hospital construction grants are studied to determine the amount of federal assistance payable under the terms of the grant. These studies cover the review of construction plans for hospitals, community health centres, hospital training facilities and living quarters for nurses and internes. Available grants are recommended on a per bed basis, subject to compliance with basic standards, for adult and children patients' beds, for newborn bassinets, and for nurses' and internes' residence beds. Similarly grants are recommended, but on a unit area basis, for community health facilities, such as out-patient department, for emergency, radiology, clinical laboratory, pharmacy and pathology departments, and for remedial therapy accommodation.

Also included for grant approval study is a growing proportion of major structural renovations or alterations to the above categories of building, where such are required to improve obsolete or inadequate facilities to meet the present requirements of good hospital service.



TABLE 14

## HOSPITAL CONSTRUCTION GRANT—ALLOCATED SINCE 1948

	1948-1961	1960-1961
Allocated toward all construction.....	\$ 151,520,000	\$ 16,910,000
Allocated toward renovation projects.....	\$ 8,061,000	\$ 2,874,000
Patients beds of all types approved for grants.....	90,436	6,325
Newborn bassinets approved for grant purposes....	11,653	801
Nurses beds (residence) approved for grant purposes .....	17,777	803
Internes beds (residence) approved for grant purposes .....	502	94

**Construction Standards and Research**

Standards for hospital construction, originally compiled by this division in 1948, have been subjected to careful review in preparation for a general revision.

A study was conducted for the National Research Council Committee on Control of Hospital Infections, to illustrate the most recent recommendations related to newborn nursery and operating room layouts.

The chief of this division has served, since its inception, as chairman of the Canadian Standards Association Committee on Safety Code for Hospital Hazards. This year the draft copy of the "Code for Use of Flammable Anaesthetics" has been finished and circulated for critical review.

**Planning, Consultations and Advisory Services**

An important function of this division is the consulting service made available to architects and administrative groups. Usually upon referral by officers of the provincial health departments, drawings illustrating preliminary proposals are presented for criticism and advice prior to formal submission for grants. During the past year over 180 such consultations have been provided.

This service has been extended as a courtesy as far afield as Great Britain and the Philippines. In some cases, to illustrate recommended alternate plan solutions, reports and drawings were produced by the division. A number of field trips were made to examine problems of hospital planning and renovation and to advise health officers in the provinces on these matters.

**Technical Liaison and Educational Activities**

Tenders were received in March, 1961, by the Department of Public Works for the new administration building to be constructed at Tunney's Pasture for the Department of National Health and Welfare. The Hospital Design Division has acted for the department as liaison with the Department of Public Works and with the firm of consulting architects. Office layouts were studied and discussed in detail with each of the 40 units involved and a complete set of layout plans for the 16 office floors and basement was developed by this division.



Representatives from this division attended the Ontario Hospital Association annual meeting in Toronto, the Quebec Hospital Association annual meeting at Montreal and the Institute of Hospital Design and Construction conducted by the American Hospital Association in Washington, D.C.

Liaison was established between the Committee on Hospitals and Health of the American Institute of Architects and the Royal Architectural Institute of Canada.

Several illustrated lectures on contemporary hospital design were delivered to professional and educational groups in Canada and a Canadian itinerary was set up for official groups from England and Scotland who visited hospitals in the U.S. and Eastern Canada during 1960.

## LABORATORY OF HYGIENE

The Laboratory of Hygiene serves as Canada's national public health reference laboratory, supplying to the country both consultative and technical services in the laboratory diagnosis of disease, to the Food and Drug Director technical assistance in the control of special biological drugs, and to many other departments of government assistance pertaining to laboratory problems.

### **Bacteriological Laboratories**

*Enteric Bacteriology:* The National Salmonella-Shigella-*E.coli* Reference Centre is concerned with those bacteria which cause typhoid and paratyphoid fevers, dysentery and gastro-enteritis. There are close to 1,000 different species or sero-types of these enteric bacterial pathogens. Enteric disease continues to be one of the major public health problems of the day. The number of specimens received for diagnosis (1893—during the year) and the volume of diagnostic reagents (375,000 ml.) distributed by this centre, seems to increase every year. A new Salmonella type, *Salmonella canada*, never found before was isolated almost simultaneously early in February in British Columbia and Ontario, and between February and October 63 isolations of this new type were identified in all provinces except Prince Edward Island and Newfoundland. The organism produced a gastro-enteritis type of disease with a predilection for children. The source and mode of spread remain a mystery.

*Staphylococci:* This laboratory acts as the National Reference Centre for the bacteriophage typing of staphylococci. It receives cultures for identification (1,664—during the year) and distributes carefully standardized preparations of the typing phages (226) and cultures (363) to other laboratories. There was active collaboration between this laboratory (the National Typing Centre) and the International Typing Centre at Colindale, England in the assessment of two new phages developed at the International Centre. This laboratory also collaborated with agencies in the U.S. in attempts to control the quality of typing phages to be distributed commercially. Collaboration with Queen's University in a long-term investigation of staphylococcal carriers was continued.



*Other Groups:* There appears to be new interest in streptococcal types on the part of the medical profession—due partly to the significance of certain types in nephritic complications of streptococcal infection. As a result, this laboratory—the only one in the country equipped to carry out this typing—received a large number of cultures (1,670) for typing, and distributed 860 ml. of diagnostic streptococcal antisera, prepared by this laboratory.

*Sanitary Bacteriology:* This unit continued to co-operate with the Public Health Engineering Division and the Department of Fisheries in the control of pollution and toxicity in shellfish growing areas in the Atlantic Maritime Provinces. The testing program to control paralytic shellfish poison, a serious seasonal problem in many growing areas, in New Brunswick, Nova Scotia and Quebec was a major control service performed by this unit. At the request of the Advisory Board on Water Pollution of the International Joint Commission, the Unit's Mobile Laboratory Service participated in an investigation of pollution in the Rainy River during July to September. An exhaustive investigation of the coliform and fecal streptococcal flora of the area was made and research on the public health significance of these organisms continued.

### **Biologics Control Laboratories**

The activities of this section are primarily concerned with the Laboratory of Hygiene's responsibility in the control of biological drugs such as vaccines, toxoids, sera and anti-biotics under the Canadian Food and Drugs Act. This involves the inspection of establishments licensed to manufacture biological products for sale in Canada, the routine control testing of these products, and research related to the improvement of control tests and to the use of these drugs in the field. In addition, a number of laboratory diagnostic reagents are also tested.

There are 64 firms holding a Canadian Biologics Licence and 37 inspections were carried out during the year.

Identity, safety, pyrogen, potency and sterility tests are carried out routinely on licensed drugs, and sterility and pyrogen tests on non-licensed injectable drugs. A total of 1,144 specimens from 81 manufacturers were tested during the year, of which 5 were rejected as unsatisfactory.

Anti-biotics of all types—oral, injectable, sprays, ointments, salves, etc.—are checked constantly for potency. A total of 1,150 samples were tested, necessitating 5,218 assays; and 12 preparations for human use, 8 for veterinary use and 91 lots of sensitivity test discs were found unsatisfactory and refused distribution in Canada.

Studies on the new staphylococcal vaccine reported last year have been continued. Field trials of this vaccine in man are now in progress in Toronto, with the collaboration of Prof. Harding le Riche, and in Montreal, with the collaboration of Prof. Rocke Robertson. It will take at least one more year before significant results from these studies may be expected, but preliminary observations on the therapeutic value of this vaccine are at least encouraging. Studies with similar "soluble" vaccines have been extended to typhoid fever and whooping cough.



There has been little success with *H.pertussis* but interesting results have been obtained with a soluble typhoid antigen vaccine. A skin test rabbit challenge technique has been developed for determining the efficacy of these preparations and studies on the particular immunogenic fractions of these vaccines are in progress.

Considerable research has been devoted to the development of chemical test procedures for the assay of the sulphonamides and other anti-bacterial drugs, and investigations of the chemotherapeutic action of tuberculostatic drugs and other anti-microbial agents are being actively pursued.

### **Biochemical Research Laboratories**

Studies on cell nutrition have been continued with emphasis on the precise amino acid and carbohydrate requirements of normal and malignant cells in tissue culture. Some differences have been observed. Two strains appear to have been successfully adapted to grow in synthetic medium M150.

Studies on the metabolic patterns of a variety of normal and malignant human and mouse cell cultures have been continued and extended. The observation that malignant tissue cultures utilize large quantities of glutamine from the nutrient medium whereas normal cultures increase the glutamine content of the medium has been confirmed. Similar studies have been undertaken with three lines of mouse ascites tumor cells in tissue culture.

A versatile apparatus for high voltage paper electro-phoresis, for simplification of the separation of complex biological materials within very short periods of time, has been developed and a patent applied for.

An extensive study on the anti-tumor activity of fatty acids is in progress, employing three lines of transplantable ascites tumors in mice. A survey of 75 fatty acids has now been completed and five of these have been shown to possess anti-tumor activity at physiological pH.

The discovery that many types of animal tumors are caused by transmissible agents (viruses) has prompted an investigation into the possible presence of such agents in the transplantable tumors and malignant cell cultures studied in this laboratory. Extensive experiments have been carried out to isolate infectious particles from these tumor cells.

The successful establishment of three types of mouse ascites tumor cells as permanent strains in tissue culture has been established without loss of tumor-inducing capacity.

A study has been started of the effects of purified staphylococcal toxins on tissue cultures. Studies are continuing on the purification of staphylococcal toxins.

### **Clinical Laboratories**

*Clinical Chemistry:* Clinical chemistry in hospital laboratories is in a stage of rapid growth and those engaged in the field are constantly confronted with newly developed methods, diagnostic reagents and equipment. In this laboratory efforts are being made to keep up with these developments and to appraise certain of them. Consultant services in this field are offered by this laboratory to hospital and public health laboratories.



Studies on the following submissions for the Manual of Clinical Chemistry for Hospital Laboratories were in progress during the year: (1) Liver function tests, (2) Acid and alkaline phosphatase in serum, (3) The care and use of the photometer, (4) Prothrombin time and (5) Glucose by the glucose oxidase procedure.

Further chemical procedures have been checked on the Technicon Auto-analyzer in the evaluation of its suitability for use in clinical chemistry laboratories. This apparatus represents a significant step forward in automation.

Evaluation of a commercial chemical pregnancy test kit was completed, and evaluation studies of two commercial products for the determination of urea nitrogen and the phosphatases and of a number of blood chemistry standards are in progress.

A survey of the accuracy of calibrated glassware submitted from eight provincial public health laboratories and a number of hospitals was completed during the year.

The preparation and distribution to hospital laboratories of standard cyanomethemoglobin solutions for the determination of hemoglobin has been continued: 270 laboratories are on the mailing list.

The new thyroid function test, involving the in vitro uptake of  $^{131}\text{I}$  labelled L-triiodothyronine by the patient's erythrocytes is under investigation.

*Syphilis Serology:* The serology laboratory has continued to serve as a national reference centre in syphilis serology. Standard reagents for the serodiagnosis of syphilis are prepared and distributed to all provincial public health laboratories. The tenth serological proficiency survey, initiated in November 1960, will be completed in June 1961, and all the provincial public health laboratories are participating.

The Treponema Pallidum Immobilization (TPI) test is performed as a service to provincial public health laboratories. It is not practical for all provincial laboratories to operate a TPI unit and the Ontario Public Health Laboratory and the Laboratory of Hygiene provide this service for Canada.

Research has been carried out on the survival in synthetic media of *Treponema pallidum*, the efficiency of the Reiter Protein Complement Fixation Test (RPCF) for syphilis, and on the preparation of a totally synthetic antigen for the serodiagnosis of syphilis.

*Evaluation Unit:* The Laboratory of Hygiene provides consultant services in respect to the Health Grants program. The laboratory aspects of the General Public Health, Professional Training, Public Health Research and other Grants come under the surveillance of this unit.

### **Virus Laboratories**

One of the major interests of this laboratory in recent years has been the control of Salk poliomyelitis vaccine, and now the new oral (Sabin) polio vaccine. All of the lots of Salk vaccine tested during the year passed especially rigorous safety tests.



A vaccine potency test is being developed in which roosters may be substituted for the more expensive and more dangerous rhesus monkeys. Preliminary observations indicate that the results will be as satisfactory and reproducible with the rooster as with the currently used monkey test.

*Oral Polio Vaccines:* Preparations for the control of oral live polio vaccines have been underway for over a year. They are of necessity both very elaborate and complicated. Three strains of attenuated poliovirus were obtained directly from Dr. A. Sabin and two reference lots of vaccine have been prepared by this laboratory for each type of poliovirus. These preparations have been used for investigation of the many tests necessary for the control of oral vaccines.

In collaboration with the Connaught Medical Research Laboratories, the University of Montreal and the Saskatchewan Department of Public Health, the Virus Laboratories have been engaged in a study of genetic markers on certain selected wild and attenuated (fed) strains of poliovirus.

Thermal inactivation of polioviruses has been studied and a report of this study was published.

*Measles Vaccine:* With the expected appearance on the Canadian market in the near future of a measles vaccine, preparations had to be made to control this vaccine.

*Virus Diagnosis:* The Virus Laboratories continued to provide a virus diagnostic service to the laboratories of the Provincial Health Departments, the department's hospitals, and the hospitals of the Departments of Veterans Affairs and National Defence, as well as to physicians and hospitals in the Ottawa district. Seven hundred and nine specimens were received and tested.

Standardized antigens for the performance of more than 9,000 tests and antisera for 3,800 tests were distributed during the year. The potency and specificity of the antigens produced by these laboratories have been increased by improved methods of preparation and research continues on further improvement. During the year, a method was developed for the preparation of a stable non-infective soluble antigen for herpes simplex using formaldehyde. The preparation of these antigens using gamma radiation was shown to be possible and the application of this principle to the preparation of virus vaccines is being investigated.

### **Zoonoses Laboratories**

Through collaboration with the provincial public health laboratories, the survey of the incidence of Q fever in cattle in Canada has been extended to all provinces. Of almost 5,000 herd milks tested by the co-operating regional laboratories of the Ontario Department of Health, 138 herds (2.8 per cent) were found to be reactors. The incidence of reactor herds was highest in the Oshawa area (26-31 per cent). Individual cow's milk from reactor herds was obtained by the Zoonoses Laboratories and as many as 47 per cent of the cattle within a herd were found to be serologically positive for Q fever (average incidence 33 per cent). To study the public health significance to man of the apparent presence of Q fever in cattle, sera were obtained from a number of herdsmen and veterinarians exposed to positive



herds; in addition, routine sera submitted to the Oshawa General Hospital Laboratory and to the Peterborough public health laboratory were also obtained. A total of 1,453 sera were tested and four gave positive reactions. These studies are continuing, and attempts are being made to isolate the etiological agent—*Coxiella burnetii*—from milk and fetal membranes of serologically positive cattle.

Field collections of 200 wild animals (rats, mice, moles, chipmunks, squirrels, weasels, groundhogs, hares, skunks, racoons, porcupines, etc.) and birds (pigeons, blackbirds, sparrows and swallows) were collected in the Peterborough and Ottawa areas and examined for zoonotic agents. Serum from a groundhog collected in Ottawa was positive for *Leptospira icterohemorrhagiae*. These studies are continuing. From these animals and birds, 684 ectoparasites were collected and are also being examined for pathogenic bacteria, rickettsia and viruses.

A study of the *in vitro* sensitivity of *Leptospira* to 14 antimicrobial agents, with the aim of developing a much needed selective medium for the leptospires, begun in 1959, was continued.

Thirty-one pools comprising 1,753 mosquitoes, collected in 1960 in Alberta by the Canada Department of Agriculture, were tested by the Zoonoses Laboratories for the presence of virus in suckling mice and in embryonated eggs. No evidence of virus in any of the pools was obtained.

An investigation of a tick infestation in Nova Scotia was completed. Collections were made at 29 locations in the five western counties of Nova Scotia and 17,600 ticks collected during the survey were examined for rickettsiae and viruses transmissible to man. All tests were negative for these pathogens.

During the year, 3,660 ml. of concentrated diagnostic antigens were distributed to the provincial public health laboratories.

### **Parasitology**

The Institute of Parasitology, Macdonald College, Quebec, serves as the parasitology section of the Laboratory of Hygiene and as a centre for:

- (a) the diagnosis of parasitic infections. During the year 514 stool specimens were examined. This figure is higher than that for the previous year, due in part to the fact that the Atomic Energy of Canada Company, Chalk River, is sending specimens from personnel of that company returning to Canada from service in India.
- (b) the distribution of diagnostic reagents. Again, the number of requests for Hydatid antigen for the Casoni test, prepared from Canadian reindeer material, has increased. This increase is attributed to a growing awareness among the medical profession of the possibility of hydatid infection, rather than to an increase in the incidence of hydatidosis.
- (c) the performance of serological tests on specimens submitted for diagnosis. During the year 14 sera were tested by complement fixation test for hydatid and 192 human sera were tested for trichinosis. Of the latter, 41 per cent were positive, 36 per cent doubtful and 23 per cent negative for trichinosis. An investigation of an outbreak of trichinosis in a



Negro settlement near North Preston, N.S. was carried out by staff members of the Parasitology Institute in collaboration with the Nova Scotia Health Department.

### **Administration**

The services of the Director of the Laboratory of Hygiene were loaned to the Ontario Department of Health, for an indefinite period, to conduct a comprehensive survey of the total laboratory facilities in the province. This survey is now in progress.

During the year, the Administration Section continued to provide to the laboratories stenographic and typing services, culture media, sterile glassware and test animals and to operate a central stores and workshop.

### **MEDICAL REHABILITATION AND DISABILITY ADVISORY SERVICE**

This unit provides a consulting and co-ordinating service in the field of medical rehabilitation and in the evaluation of disability under the Disabled Persons Allowances program.

Advice is provided on medical, social work and technical aspects of medical rehabilitation programs to hospitals, rehabilitation centers, specialized clinics, university teaching schools, voluntary organizations and the various levels of government—local, provincial and federal. Primarily, the aim of the service is to stimulate, encourage and assist provincial health departments in planning and developing balanced programs whereby facilities for medical rehabilitation will be available to every disabled child and adult in Canada who is able to profit from treatment or retraining.

More than 70 rehabilitation facilities have been established in Canada since the inception of the Medical Rehabilitation Grant (now the Medical Rehabilitation and Crippled Children Grant) in 1953.

The service has continued to provide advice and assistance in the expansion of medical and social services for medical rehabilitation and in the promotion of more effectual and increased training of all members of the rehabilitation team such as physicians, social workers, physical, occupational and speech therapists.

The work of the consultants has included the compilation of detailed statistical and other reference material on rehabilitation facilities and on medical and technical training for presentation to organizations, committees and conferences. Field visits to the various provinces were made to enhance awareness of current developments in medical rehabilitation and the medical aspects of the Disability Allowances program.

Displays and other informational materials were prepared. Career pamphlets were produced on opportunities for physical and occupational therapists in Canada and a supplement on medical rehabilitation was written for Canada's Health and Welfare, as well as other articles for publication.

The consultants took part in a number of departmental study and planning committees dealing with such subjects as chronic illness and physical fitness. They



also participated in relevant interdepartmental committees and attended the meeting of the National Advisory Committee on Rehabilitation held in Ottawa in May at which they presented a report and took an active part in the discussions of the committee regarding the expansion of medical rehabilitation programs across Canada.

Activities in the international sphere increased markedly during the year. The Chief and Medical Consultant of the Service spent eight months as Chief Delegate of the League of Red Cross Societies and the United Nations World Health Organization in charge of the Paralysis Relief Operation in Morocco. A direct part was taken for the first time in the World Congress of the International Society of Rehabilitation of the Disabled held in New York in August, which led to the establishment within the society of an international committee on social work in rehabilitation. The international exchange of ideas was also expanded through visits from United Nations fellows engaged in medical rehabilitation in Thailand, India, Sweden, Denmark, Brazil and Australia.

TABLE 15

MEDICAL REHABILITATION AND CRIPPLED CHILDREN  
GRANT ANALYSES, 1953-61

	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61*
Amount available .....	\$500,000	1,000,000	979,484	998,984	961,591	964,234	1,020,948	2,568,251
Amount and .....	\$ 75,855	213,374	355,927	547,085	736,662	814,215	754,214	1,312,602
per cent approved .....	15.8%	21.3%	36.3%	54.7%	76.6%	84.4%	73.8%	51.1%
Amount and .....	\$ 58,222	168,679	303,419	487,724	633,397	691,612	673,399	686,927
per cent spent .....	12.1%	16.8%	30.8%	48.8%	65.8%	71.7%	65.9%	26.7%

\*For 11 months to March 1, 1961 instead of full fiscal year.

On April 1, 1960 the Medical Rehabilitation Grant of approximately \$1 million (shareable) available annually to the provinces to assist them in developing their medical rehabilitation programs was combined with the Crippled Children Grant (non-shareable) of approximately \$500,000 to become the Medical Rehabilitation and Crippled Children Grant. To this was added \$1 million for the further stimulation of medical rehabilitation, making an annual total available of about \$2,500,000.

Reduction of use of the Medical Rehabilitation Grant in 1959-60 was dependent on the availability of medical restoration services and physical medicine equipment under the recently instituted Hospital Insurance and Diagnostic Services Program. During 1960-61 it should be noted that the Northwest Territories on April 1, 1960, and the Province of Quebec on January 1, 1961, commenced their Hospital Insurance Programs with a further effect on use of this grant. However, the amount of grant use increased during 1960-61. Not only have projects totalling over \$1,300,000 been carried on but the provinces have contributed about \$250,000 for services for crippled children formerly available on a non-sharing basis



but now being shared. Actually, some \$350,000 more has been devoted to medical rehabilitation in Canada during the current fiscal year despite a reduced percentage of use of this grant.

TABLE 16  
NUMBERS<sup>(a)</sup> AND PERCENTAGE DISTRIBUTION OF CASES  
GRANTED DISABILITY

Category	1955-56 <sup>(b)</sup>	1956-57	1957-58	1958-59	1959-60	1960-61 <sup>(c)</sup>
NUMBERS						
Granted.....	27,222	8,866	14,048	11,426	7,131	7,925
Medically Rejected.....	6,425	5,719	3,810	9,925	7,973	4,628
Deferred.....	282	171	146	253	280	249
Referred for Rehabilitation <sup>(d)</sup> .....	542	101				
All Categories.....	34,471	14,857	18,004	21,604	15,384	12,802
PERCENTAGES						
Granted.....	79.0	59.7	78.0	52.9	46.4	61.9
Medically Rejected.....	18.6	38.5	21.2	45.9	51.8	36.2
Deferred.....	0.8	1.2	0.8	1.2	1.8	1.9
Referred for Rehabilitation <sup>(d)</sup> .....	1.6	0.7				
All Categories.....	100.0	100.0	100.0	100.0	100.0	100.0

(a) The Province of Ontario reports only on the cases granted an allowance.

(b) Fifteen months period, viz. from January 1st, 1955 to March 31st, 1956.

(c) Eleven months only, viz. from April 1st, 1960 to February 28, 1961.

(d) In May 1957, subsection 3 of the Disabled Persons Regulations dealing with a favourable rehabilitation prognosis was revoked.

## MENTAL HEALTH DIVISION

The division is responsible for providing national leadership in the mental health field. It has three major spheres of activity, namely, the provinces, other federal departments and other divisions of the Department of National Health and Welfare. Lacking a chief for the first half of the year and because of other vacant positions, it was not possible to spend sufficient time in the provinces to carry out co-ordination and stimulation. Other functions of the division were carried out as in previous years and there was increased activity in certain vital areas noted below.

Health Grants Administration was advised on the provinces' use of the national Mental Health Grant of almost \$9 million. The pattern followed that of recent years with roughly half of the funds being used for mental hospitals and about a quarter for psychiatric units in general hospitals and mental health clinics.

Vital events of the year were as follows:

1. Canadian mental hospitals were surveyed to study the "open door" policy. The final report of this survey dealt with almost 500 wards in 26 mental hospitals and with the attitudes of the public, the patients, and the staff to the opening of mental hospital doors.



2. The development of industrial therapy in United Kingdom mental hospitals was observed. A comprehensive report was distributed as a supplement to the division's monthly bulletin *Canada's Mental Health*. It was apparent that industrial therapy was of great interest in Canada because the demand for this supplement far exceeded the supply.

3. In-patient services in Canada for the treatment of emotionally disturbed children were surveyed. The detailed findings were presented in the Mental Health Division's Technical Report No. 5. The information assembled described 13 treatment units representing about 350 beds.

4. The world's outstanding authority on addiction to alcohol prepared a report on European legislation and programming to deal with this problem. It is anticipated that this report will give expert guidance to the department's approach to the problem of alcohol addiction in Canada.

5. The treatment of addiction to narcotics was studied during a visit to centres in the U.S.A. Liaison between the Departments of Justice and National Health and Welfare was increased and the Commissioner of Penitentiaries met with the Subcommittee on Addiction to discuss the plans of his department for the treatment of criminal narcotic addicts.

6. The division carried out its numerous informational functions. The news bulletin, *Canada's Mental Health*, reached a monthly circulation of 6,000 copies. Some mental health pamphlets were revised and large numbers distributed. A film on mental hospital volunteers and their services reached the stage of a trial print. Two publications on statistical facts of mental illness were produced. One was prepared for broad circulation in *Canada's Health and Welfare* and, in co-operation with Research and Statistics Division, another more comprehensive pamphlet was prepared for use by legislators and mental health services administrators.

7. Formal study of the effectiveness of health education pamphlets was begun. This was a concern of both a departmental committee and a special advisory subcommittee. A survey of the scientific literature on the use of health pamphlets was completed. This was followed by the careful design of research to be carried out in one English and one French speaking centre under university auspices.

8. The division carried out liaison activities with professionals in the social sciences, and with provincial, national and international agencies. There was collaboration with divisions of National Health and Welfare and consultation with numerous federal departments.

International activities included attendance by a consultant at a World Federation for Mental Health meeting to study the psychological problems of general hospitals. The division was represented at a mental health education conference called by the U.S. National Institute of Mental Health. The World Health Organization invited the chief of the division to become a member of the Expert Committee on Mental Health. He was also appointed to the committee planning the Canadian Mental Health Services Institute to be held in Ottawa in January, 1962.



The year began and ended with meetings of the Department's Advisory Committee on Mental Health. The second of these two meetings saw an increase of the committee's sub-committees from five to a total of seven. The two new sub-committees were created to consider: (1) Development of mental health services, and (2) Rehabilitation. Increase in advisory committee meetings and in the number of sub-committees reflected the greatly increased interest in mental health which occurred this year nationally and at all levels of government.

### CHIEF NURSING CONSULTANT

During the past year the Chief Nursing Consultant has continued to provide an advisory service on a request basis in the broad general field of nursing, and to act in a liaison capacity between the department and the Canadian Nurses' Association.

Day-to-day activities have included:

(1) Review and assessment of National Health Grants projects relating to general areas of nursing.

(2) Service on a number of committees—departmental and other.

(3) Visits to provinces to gain information concerning the general nursing picture, or to carry out special assignments. In 1960 a visit to the Atlantic provinces was combined with attendance at meetings of the New Brunswick Association of Registered Nurses; the Canadian Public Health Association; and the Canadian Nurses' Association.

(4) Preparation of papers for presentation at meetings; preparation of articles for publication; provision of suggestions for an exhibit (Organized Home Care), together with draft of leaflet for same.

(5) Arrangement of observation visits to the department for nursing students attending Canadian universities (McGill, University of Montreal, University of Ottawa).

(6) Co-operation with the Canadian Nurses' Association in the arrangement of programs for international nursing visitors. During the past year an interesting guest was Miss Elizabeth Hill, of the Nursing Section of World Health Organization, who was spending time in Ottawa and Montreal, recruiting French-speaking nurses for service with WHO in Africa.

The Departmental Nursing Committee, comprising senior nursing personnel, has had an active year culminating in the first federal-provincial public health nursing conference to be held under departmental auspices.

The purpose of the three-day meeting was twofold:

(1) To exchange views on programs and problems.

(2) To explore, with the provincial directors of public health nursing, ways in which the federal nursing group might be of greater assistance in the strengthening of provincial programs.



It would appear that this first conference was successful, in some degree at least, in both these objectives, and that out of it may emerge certain helpful guidelines for future action.

## NUTRITION DIVISION

### **Introduction**

Although our national food supply is more than sufficient to provide adequate diets for all Canadians, nutritional problems are known to exist and nutritional deficiency diseases continue to be diagnosed. The program of the Nutrition Division is directed to the elimination of these nutritional deficiencies and to improvement of the health of the population by promoting wise use of the abundant food supply. This program includes research to define the nutritional status of population groups, publication of educational materials, and special technical and consultant services.

The demand for consultant services and nutrition publications increases each year.

The development and extension of government hospitalization plans has increased the demand for expert advice regarding standards for hospital food service and plans to recruit staff have been approved so that adequate time may be given to this aspect of the division's work.

### **Research**

Evaluation of data obtained during the survey of older people, in Montreal, early in 1960, was completed. Individual reports were sent to the participants and a complete report of the study was forwarded to the Montreal Department of Health. A progress report on the study, in which five areas have now been included, was prepared. Plans have been made for the next phase of the study to be carried out in British Columbia.

Forms developed for food habits studies in schools were revised and submitted to nutritionists with provincial health departments for use and evaluation. The objective of this project, the development of a standardized form for use in all provinces so that results will be comparable, was endorsed by the provincial nutritionists. Further revisions are being made on the basis of the evaluation findings.

At the request of the Canadian Council on Nutrition, data from nutrition research throughout the country are being assembled and the nucleus of a repository for this type of information has been established.

Evaluation, in terms of nutrients, of statistical data on Canadian food consumption re-affirmed the adequacy of our national food supply.





The Nutrition Division conducts an active research program on the state of nutrition of the Canadian people. Their educational and informational material stresses the need for a balanced diet, which should include meats, vegetables, milk, fruits and other health-promoting foods.

### **Laboratory Services**

The clinical nutrition laboratory provides facilities for laboratory procedures related to nutrition which are not available from routine clinical laboratories or provincial health laboratories. Micro-techniques have been developed for studies of deficiencies of specific nutrients using only the amount of blood obtained by a simple finger prick. These methods facilitate group studies, as in surveys of a community.

Analyses of serum and urine samples provide a diagnostic aid for evaluation of nutritional status. These laboratory services are available to provincial health departments and through them to all physicians in Canada. During the past year, 482 serum samples and 406 urine samples were submitted for specified analyses and a total of 5,874 tests were performed. (See table.)

Continuing our survey of hospitalized Eskimos, 255 specimens were received and 1,276 tests completed. (See table.) In collaboration with the Occupational Health Division, laboratory services were provided for a survey in St. Lawrence, Newfoundland. In co-operation with the University of Montreal, a class project was carried out with nutrition students to give them an appreciation of work done in public health nutrition.



### **Experimental Kitchen**

The development of recipes for institutional use continues to be the major function of the kitchen. These are published for use in small hospitals, homes for the aged, camps and other non-profit institutions. In addition, in co-operation with other government agencies, studies were carried out on the preparation and serving of a variety of food products.

### **Information and Education**

A three-day course dealing with nutrition education was conducted in Edmonton in co-operation with the Canadian Home Economics Association and immediately preceding their biennial convention in July. The course was attended by 120 persons from across Canada. The proceedings were prepared for publication.

Assistance was given for a provincial nutrition conference in Halifax.

Two provincial health departments received assistance in planning and conducting three one-week refresher courses for cooks from small institutions.

Booklets, manuals and other publications of proven usefulness were revised and reprinted for distribution by the provincial health departments and/or for sale by the Queen's Printer. Approximately 900,000 English and French pieces of material were distributed.

The 8-page monthly bulletin "Canadian Nutrition Notes" continued to be published for professional people. The mailing list was revised and approximately 4,500 English and 1,500 French copies are now distributed every month.

"Canada's Food Rules", which has been the basis of nutrition education in Canada for many years, is being revised on recommendation of the Dominion Provincial Nutrition Committee to the Canadian Council on Nutrition. The new statement, to be known as "Canada's Food Guide", will provide a fresh approach in presentation but does not reflect any basic change in the underlying nutritional principles.

### **Consultant and Advisory**

As in the past, other agencies within the department requested and received advice and assistance such as lectures at Civil Defence Emergency Feeding courses; consultations with civil servants referred because of possible nutrition problems; review of requests for Health Grants with aspects of nutritional concern; collaboration in preparation of pamphlets and other educational materials containing nutrition information; consultation with Indian and Northern Health Services on basic rations, relief rations, food costs, and other matters.

At the request of the Department of Public Works, food services in four government buildings were inspected and work continued on standardization of serving sizes in all government cafeterias. Co-operation continued with the Department of Northern Affairs to improve the acceptability of rations issued for Northern Officers. The Department of Transport obtained advice on rations, food supplies, purchasing and storage of food, and training courses for ships' cooks.

Provincial health departments received advice on institutional food service, educational methods, and replies to many specific technical questions.



TABLE 17  
NUTRITION LABORATORY SERVICES—1960-61  
SERA

Origin	Total Specimens	Vitamin A	Carotene	Vitamin C	Total Protein	Albumin Globulin	Cholesterol	Total Lipids	Alkaline Phosphatase	Hemoglobin	Erythrocyte Sedimentation Rate	Hematocrit
Laboratory Services Requested by:												
Provincial Health Departments,												
Other Federal Departments,												
Universities and Private												
Physicians	481	470	440	399	382	351	351	351	351	378	348	100
Eskimo (Our Hospital Survey)	129	129	129	129	129	129	124	129				
Civil Service Referrals	1	1	1	1								
Totals	611	600	570	529	511	480	475	480	351	378	348	100

TABLE 18  
URINE

Origin	Total Specimens	Riboflavin	Thiamine	Niacin	Sugar	Albumin
Laboratory Services Requested by:						
Provincial Health Departments, Other Federal Departments, Universities and Private Physicians						
Eskimo (Our Hospital Survey)	405	405	405	405	366	366
Civil Service Referrals	126	126	126	126		
	1	1	1	1		
Totals	532	532	532	532	366	366

Total Specimens—1,143  
Total Tests —7,150



**Advisory Committees**

A two-day meeting of the Dominion Provincial Nutrition Committee was held in June. On the first day the committee met alone and on the second it met with the Canadian Council on Nutrition. The committee recommended changes in Canada's Food Rules and submitted these to the council for approval. In addition, it considered food habits survey forms, dietary consultation services for hospitals, and informational materials. Subjects dealt with by the Canadian Council on Nutrition included: revision of Canada's Food Rules, revision of the Canadian Dietary Standard, nutritional implications of food and drug regulations, the food situation in Canada, and the need for increased emphasis on nutrition education.

**OCCUPATIONAL HEALTH DIVISION**

This division offers assistance in the organization and development of occupational health services in provincial governments and private industry; carries out research and investigations on occupational health problems; provides specialist, consultative, and technical assistance to provincial governments, municipalities, private industry, and other agencies on matters concerned with occupational disease or injury and atmospheric pollution. It also provides consultative and technical assistance to all Federal Government agencies for the purpose of correcting or improving working conditions which may affect the health of the federal employees.

Demands for service from provincial health departments, federal departments, Crown companies, and industry have continued to increase and reflect the growing interest of the public in matters concerned with occupational health and air pollution. A number of co-operative studies were carried out with the Department of Agriculture, the Meteorological Branch of the Department of Transport, the Canadian National and Canadian Pacific Railways, the National Research Council, the Ontario Air Pollution Control Branch, and provincial departments of health on problems involving the assessment of hazards from toxic gases, vapours, and dusts in mines, railway tunnels, urban, industrial, and rural areas. Other projects have dealt with radiation levels in non-uranium mines, surveys of noise and ventilation in public buildings and working areas, and the organization and development of a national air sampling network.

**Environmental Assessment Unit**

The investigation of the radiation hazards encountered in the fluorspar mines of Newfoundland, which was initiated in 1959, has continued. Through the co-operation of the companies and provincial government concerned, it has been possible to improve the ventilation system and thus reduce the high radiation levels previously encountered. A follow-up survey was made to ensure that the concentrations of radioactivity in the working areas of the mines were below the maximum permissible levels established by the International Commission on Radiological Protection.

Two surveys in railway tunnels were carried out to assess the hazards to maintenance and operating crews and passengers from exhaust produced by diesel



locomotives. A preliminary survey was conducted in the Connaught Tunnel near Glacier, British Columbia, at the request of the Canadian Pacific Railway Company. Initial findings indicate that natural ventilation of the tunnel might be feasible, provided that attention was given to scheduling of maintenance operations by working crews inside the tunnel during periods of low or no train activities. Additional study of this problem is indicated.

Since an earlier study of gases and smoke from diesel trains in the Mount Royal Tunnel of the Canadian National Railway in Montreal was carried out under winter operating conditions, it was considered necessary to repeat the survey under summer conditions when railway operations were increased by the additional load of summer commuting trains.

Surveys of air contamination hazards were carried out at the request of a number of federal establishments. Some of the problems concerned faults in ventilation systems, leakage of fumes from laboratory fume hoods, poisoning by hydrogen fluoride fumes, contaminants from a helium liquefaction plant, and the use of phosphor inks in postal procedures.

Co-operation with the Mines Branch of the Department of Mines and Technical Surveys in the assessment of environmental conditions in the mines of Canada was continued.

Instrumentation on the meteorological air-pollution tower erected on the Central Experimental Farm at Ottawa in December, 1959, was maintained during 1960. The data from the tower is being utilized for statistical tabulation in connection with the national air sampling network program. Some of the information obtained from the tower data and also from air pollution sampling instruments maintained at Ottawa for training and research purposes has been made available to the Air Pollution Control Officer of the City of Ottawa.

A study of contamination of the Yellowknife area by arsenic in effluents discharged from stacks and in mine tailings from the gold mining and smelting operations was continued. Within the last year, a very great improvement has been effected in the control of arsenic contamination by one of the large mining companies. However, the arsenic that has been deposited over the countryside during the past ten years will continue to be leached out and washed into various bodies of water in the district for some years to come. The area will, therefore, require continuing supervision.

In the spring of 1960, this division was requested to assist field groups of the Federal Department of Agriculture, the Meteorological Branch of the Department of Transport, and the Imperial Tobacco Company in studying the air pollution conditions suspected of causing damage to tobacco leaf. This study was undertaken with additional assistance provided from the Ontario Air Pollution Control Branch, and it presented a unique opportunity to develop technical procedures and equipment for the determination of ozone, nitrogen dioxide, airborne particulate matter, and aldehydes. Experience gained through participation in this study is being applied in the general air pollution studies throughout Canada.

Records of the summer's work at Port Burwell indicate beyond reasonable doubt that ozone or oxidant is the causative agent in weather fleck of tobacco. The ozone or oxidant compounds, in association with other environmental factors,



represent photochemical by-products of reactions that occur in the atmosphere between contaminants many hours after release from distant sources. Occasional smog of this kind has been reported in the Sarnia, Ontario, area. In the present problem, most of the damaging fumigations appear to be associated with the southerly or southwest flow of air over Lake Erie.

On behalf of the International Joint Commission, the program of smoke measurements and operation of a voluntary smoke abatement regime for Great Lakes vessel traffic on the Detroit River was continued at the Windsor Laboratory.

Provincial health departments have been encouraged through the division's consultant services and assisted under the Federal Health Grants to study atmospheric pollution problems in Sydney, Nova Scotia; Montreal, Quebec; Winnipeg, Manitoba and Vancouver, British Columbia. Data from sampling stations in these cities are being submitted to the Consultant, Atmospheric Pollution, on a regular basis for comparison and correlation. Additional sampling stations are maintained by staff of the Occupational Health Division in Ottawa and Windsor, Ontario, and by municipal organizations in Toronto and Hamilton. These stations comprise the nucleus of a national sampling network that will be expanded as interest increases in such air pollution activities on provincial and municipal levels. The contaminant levels that are being measured on a comparable basis consist of dustfall, suspended or airborne particulate matter and sulphur dioxide.

The Chemistry Section analyzed a total of 834 samples during the fiscal year in the assessment of environmental contamination by fluoride, sulphur compounds, ozone, organic pollutants, silica, and toxic heavy metals such as lead, arsenic, beryllium, copper, and iron. Of these samples, 435 were related to the Newfoundland survey on the health of miners and consisted of the analysis of water, urine, blood, and lung tissue. For the Yellowknife study 94 samples, consisting of vegetation, water, and stack gas, were analyzed for arsenic contamination. Other analyses included samples submitted by the Food and Drug Directorate, the Wildlife Section, the Province of Alberta, and other agencies.

The Physics Section analyzed, by X-ray diffraction and X-ray spectrographic techniques, a total of about 100 samples from all parts of the country for free silica, calcium fluoride, asbestos, mica, and other materials. Special studies were conducted on lung tissue in a joint study with the Clinical Consultant on the relationships between retained dust particles in the lungs and lymph nodes of fluor spar miners in Newfoundland.

### **Biological Unit**

Progress has been made with studies relating to the unusual incidence of cancer of the lung amongst a group of miners in Newfoundland as reported in the 1960 Annual Report. A clinical survey was carried out to evaluate the health status of this group of miners and ex-miners by bringing together a team of expert investigators under the direction of the Occupational Health Division. Three hundred and ninety miners and ex-miners were examined.

Work has continued on the fundamental mode of action of the organo-phosphorus group of insecticides to which many industrial and agricultural workers and, at times, the general public are exposed.



### **Senior Nursing Consultant**

The general nursing consultant program continues with the original objective, which is to interpret and promote occupational health nursing as an integral part of the total health services to Canadians. This program is specifically concerned with the extension of health services to all Canadians at and through their places of work.

### **Extramural Research and Development**

A program for the stimulation of university research in the field of occupational health has been carried on for two years by the Senior Scientific Consultant of the division. As a result of this program, a number of departments of eastern Canadian universities have undertaken occupational health research projects supported by the National Health Grant funds.

### **Educational and Technical Information Services**

The division continued to publish the "Occupational Health Review" and the "Occupational Health Bulletin", dealing with current developments in occupational health in Canada and with important developments in other countries. Due to increasing requests for pamphlets and other material previously published by the division, a number of these publications were reprinted. Two new pamphlets were published during the year on the following subjects: "Artificial Respiration", "Occupational Safeguards—Head to Toe".

## **PUBLIC HEALTH ENGINEERING DIVISION**

The primary function of the division is twofold in character:—

- (a) To administer certain statutory responsibilities under Section 5 of the National Health and Welfare Act.
- (b) To provide technical and consultative services as requested by other departments of government, relating to surveys and investigations, the review of plans for future developments, for new and improved facilities, and the examination of existing facilities with reference to matters of water and sewage treatment, waste disposal, pollution abatement and general sanitation.

Its role is to facilitate in an advisory capacity rather than to act by direct authority except where statutory obligations or agreements are involved.

### **Administrative Organization**

The Head Office at Ottawa is the co-ordinating centre of the division's work program, which embraces fields of activity in all provinces of Canada, the Yukon and the Northwest Territories. Four Regional Offices, supported by four



District Offices and one Sub-Office have been established to administer the work program and are located at convenient points extending from Truro, N.S., to Vancouver, B.C.

Two chemical laboratories have been established, one at Ottawa and the other at Vancouver, B.C., to supplement field work and to provide technical information required in the treatment of water supplies, the operation and design of waste disposal facilities, and to carry out chemical determinations necessary to appraise water quality, pollution abatement indices, and the character of domestic and industrial waste effluents.

### **Statutory Functions**

The administration and the performance of duties required by certain statutory acts and regulations continued to receive attention, particularly in relation to the health of travellers and operating personnel on common carriers.

Under the Public Works Health Act and Regulations work camps were examined on federal projects. Those associated with the development of the South Saskatchewan River Dam were again prominent in this program, as well as others established on highway construction projects in National Parks, and for a number of Defence Construction Limited contracts.

### **Advisory and Technical Services**

During the year the work program reflects a major increase in the requests received for technical services in respect to co-operation with other federal departments and Crown corporations on matters of mutual interest in the field of public health engineering.

In retrospect there are always certain accomplishments that warrant special mention in view of their significance, value or interest, and some of these activities are cited to illustrate the scope and variety of the work program.

### **Special Investigations**

1. At the request of Canadian Arsenals Limited a survey of waste effluents made at the Val Cartier plant demonstrated that contaminants were not present in sufficient quantities to adversely affect the quality of the water used by a downstream municipality.

2. Visits were made to DEW Line sites to examine water supplies and waste disposal systems in order to advise on the adequacy of treatment provided.

3. A study of the Blair Light Sewage Disposal Units for use aboard vessels was carried out at the express wish of the International Joint Commission. Some 400 analytical determinations were made in evaluating the quality of the effluents produced. The study indicated a substantial decline in the total number of coliform organisms present in the final effluent when the units were operating satisfactorily.

4. Additional studies were carried out to determine the efficiency of the stabilization sewage ponds serving the RCAF Station at Falconbridge and the



Army Camp at Ipperwash, both in Ontario, and a number of sewage treatment plants which make use of extended aeration treatment principal. These treatment units were of a size that could be adopted to small installations such as hospitals, Indian schools, and relatively small communities.

5. A research study was made of the chlorination effects on moderately polluted sea water from Mulgrave and Petit de Grat Harbours in Nova Scotia. The findings of this research work are of importance to fish processing plants in the location and construction of intakes to insure a water supply of approved quality as required under CGSB voluntary certification program of the Department of Fisheries.

6. A study was made of the water supply at the Petawawa Forest Experiment Station, Chalk River, Ontario, in an effort to advise on water treatment facilities required to remove colour, suspended matter, and the adjustment of water characteristics to remove aggressive tendencies. Subsequent to work carried out at the station and in laboratory studies, specifications for water treatment equipment are now being prepared for submission to the Department of Forestry.

#### **Department of Fisheries—Shellfish Control and Fresh Frozen Fish and Voluntary Certification Program**

In those provinces in which shellfish are processed commercially for export, control of the industry continued to demand attention, though not to the same extent as in other years due to a decline in the productivity of shellfish of acceptable quality. Sanitary surveys of shellfish growing areas were conducted at six locations in New Brunswick, two in Nova Scotia, and one in Prince Edward Island. Closure proceedings, as a co-operative control measure with the Department of Fisheries, were taken when toxicity levels exceeded the recommended limits. Close liaison was maintained with the health authorities for the provinces of Quebec and British Columbia, as required in the certification of approved areas from which shellfish can be taken and processed for export purposes.

The Voluntary Certification Program for fresh and frozen fish plants carried on by the Department of Fisheries with the co-operation of this department, under the CGSB Specification 32-GP-141A, has demanded a significant increase in the overall work load in order to adequately cover this assignment. All told, 35 separate investigations were made.

#### **Department of Northern Affairs and National Resources**

Assistance was provided on problems of mutual concern throughout the National Parks which are examined at least annually, and oftener where necessary. Special attention was given in the development and the design of sewage lagoons for Kootenay Park and Elk Island Park, and water supply problems were studied at Banff and Jasper. A lecture course on restaurant sanitation was repeated at the Riding Mountain National Park in Manitoba. Sanitary surveys, water supply examinations, restaurant sanitation, sewage disposal problems and the development of new and improved facilities continued to form an important part of the assistance provided to park authorities.



**Northern Administration Branch**

Thirteen settlements were visited in the Northwest Territories and reported upon in respect to problems of water supply, sewage disposal and sanitation. At Tuktoyaktuk a comprehensive survey was made involving the future development of a year round water supply system for this townsite. Studies were also made at Frobisher Bay concerning the disposal of sewage into Koojesse Inlet. Since townsite planning and future developments will depend on adequate treatment and disposal of sewage, without the creation of offensive conditions, a study of currents within the inlet of the bay was carried out to determine the course and behaviour pattern that could be expected in the dispersal of sewage effluents discharged into the bay.

**Indian Affairs and Northern Health Services**

Close liaison was continued with the Indian Affairs Branch of the Department of Citizenship and Immigration, Northern Health Services of this department, and the Department of Public Works with respect to problems of water supply and sewage disposal in a number of Indian schools and hospitals. Prominent in this regard was the assistance provided in the operation and study of the new sewage treatment plant serving the Indian Hospital at Moose Factory, Moosonee, Ontario.

**International Joint Commission—Water Pollution Activity**

Active participation and services provided in this field of activity formed a major contribution during the fiscal period covered in this report. Studies under the new Rainy River pollution reference were initiated and the services of the Mobile Bacteriological Laboratory and its staff, made available through the co-operation of the Laboratory of Hygiene, are gratefully acknowledged.

Further work was also required in the preparation of the St. Croix River Pollution Report, following a detailed study of the lower reaches of the river during the summer of 1959. Presentation of this report was made before the International Joint Commission in Washington.

Continued interest through membership on the various Advisory Boards to the International Joint Commission on control of water pollution was maintained.

**Central Mortgage and Housing Corporation**

The recent enactment of Bill C-42, an Act to amend the National Housing Act 1954, has had an important impact on the work of this division. By this Act, Central Mortgage and Housing Corporation is now authorized to make a loan to a municipality for the purpose of assisting in the construction or expansion of a sewerage system and sewage treatment project. Its implications and effect as an aid in the elimination and prevention of pollution is significant to the work and objectives sought by the division in its pollution control activities. By request, assistance in an advisory capacity on technical matters related to sewage treatment has been provided to the corporation by engineers of this division.



A marked increase in referrals for advice on sewage treatment by Central Mortgage and Housing Corporation is anticipated as the program develops. Close liaison is being maintained on a regional and district basis with engineers and officials of the corporation.

### **Department of Public Works**

Close liaison was continued with the Architectural Branch of the Public Works Department on matters of water supply, sewage disposal and treatment facilities associated with residential schools, RCMP barracks, Customs and Immigration Centres and other federal buildings across Canada.

The review of plans for new or improved cafeteria facilities in public buildings in respect to health and sanitation was continued. Examinations of existing facilities, in relation to their maintenance and operation, were made in a number of these eating establishments, at the request of the Department of Public Works, thus affording protection to the consumers through resulting improvements.

### **Provincial Co-operation**

Close co-operation and liaison were maintained with provincial departments of health or Pollution Control Agencies on matters of mutual interest. Assistance provided included a six weeks' pollution survey of the Saint John River for the New Brunswick Water Authority, and a sea water survey at Alder Point, Nova Scotia, in order to determine water quality suitability for a proposed fish plant development. A survey of the Summerside Harbour, Prince Edward Island, was also conducted to determine the extent of existing pollution and the effect on harbour water quality in the proposed construction of an outfall sewer to carry all the sewage from the town into a deep water channel for disposal purposes. It was evident that this alone, without adequate sewage treatment, would not reduce the pollution load in the harbour materially.

### **Educational Services**

During the year there has been a marked increase in the division's participation in training programs. These included lectures to Water and Sewage Plant Operator Schools at Vancouver and Edmonton, to Fishery Inspection Officers, and Fish Plant Operators in the Maritimes, and to Marine School Operator Classes in Ontario and Quebec on matters of related interest.

The restaurant course for food establishment personnel in Riding Mountain Park was repeated, and assistance was rendered through participation in emergency feeding courses at the Civil Defence College at Arnprior, in lectures on water supply and sanitation.

One member of the staff took advantage of the opportunity to attend Berkeley College in California for post graduate studies.

Several papers were prepared for presentation before professional organizations and for subsequent publication in technical journals. The monthly news bulletin "Public Health Engineering in Canada" was continued on behalf of the Advisory Committee on Public Health Engineering.



### **Northern Research**

Activities in field research throughout the north have been restricted, due primarily to a change in personnel and the delay in obtaining replacement of a qualified engineer to carry out a program in this area. To date the field research program has consisted of two installations; a community sewage oxidation pond at Aklavik, N.W.T., and a small sewage oxidation pond for a Transient Centre at Inuvik, N.W.T., as well as the development of waste water disposal pits in permafrost areas to serve individual households at other centres in the north. Results indicate that these installations are successful, though some modifications may be required.

It is anticipated a number of sewage installations involving various methods of disposal, will be made for purposes of assessment in the near future. These will include package type treatment units, Destrol units, and other forms of oxidation treatment devices.

### **Laboratory Services**

The marked increase in requests for laboratory services from district offices, and from other departments, was clearly reflected during the year by the volume of work completed by the Ottawa laboratory staff. Approximately three times the number of samples submitted for analysis in the previous year were processed in 1960-61.

During the year the program previously established to provide chemical analysis of all water supplies serving the DEW Line and the RCAF Stations was continued. The Department of Transport and the National Parks Branch made extensive use of the service provided through the division's laboratory facilities. Information on the treatment procedures for specific water supplies was assembled and limited investigations were carried out on such matters as iron and colour removal and corrosion control.

Actual field activities of interest include:

1. Setting up a temporary laboratory for a pollution survey of the Saint John River, New Brunswick. Participating personnel were instructed in the analytical procedures required and an operating routine was established.
2. In the Maritimes an investigation was carried out to evaluate the efficiency of high chlorine dosage with short contact time application for the treatment of polluted seawater.

With the provision of additional equipment, the Vancouver laboratory is now able to handle a wide variety of analyses. This will be of particular benefit when stream pollution surveys and sewage treatment studies are initiated. As in previous years, this laboratory processed a large number of water samples submitted by the Prairie and Pacific Regions.



TABLE 19  
STATISTICAL SUMMARY OF FIELD WORK

	Design and Compil- ation	Surveys and Exams	Bact. Analy. Water	Chem. Analy. Water	Bact. Analy. Milk	Bact. Analy. Ice	Sewage Effluent samples
Vessel Sanitation.....		280	1,148		97	6	93
Railway Sanitation.....		912	1,565	2	144	2	
Aircraft and Airport Sanita- tion.....		114	951		168		1
Shellfish Sanitation.....		53	882				
Water Supply Sources For Common Carriers.....		132	480	38			
Ice Supply Sources for Com- mon Carriers.....		38	110			140	
Co-operation with Federal Government Departments.	15	636	1,032	133			695
Co-operation with Provincial and Municipal Govern- ment Agencies.....		14	216	9			
Grand Total.....	15	2,179	6,384	182	409	148	789

## RADIATION PROTECTION DIVISION

### General

The radiation protection activities of the department expanded further during 1960-61. Significant advances were made in terms of accommodation, and additions were made to the staff to cope with the enlarged technical program.

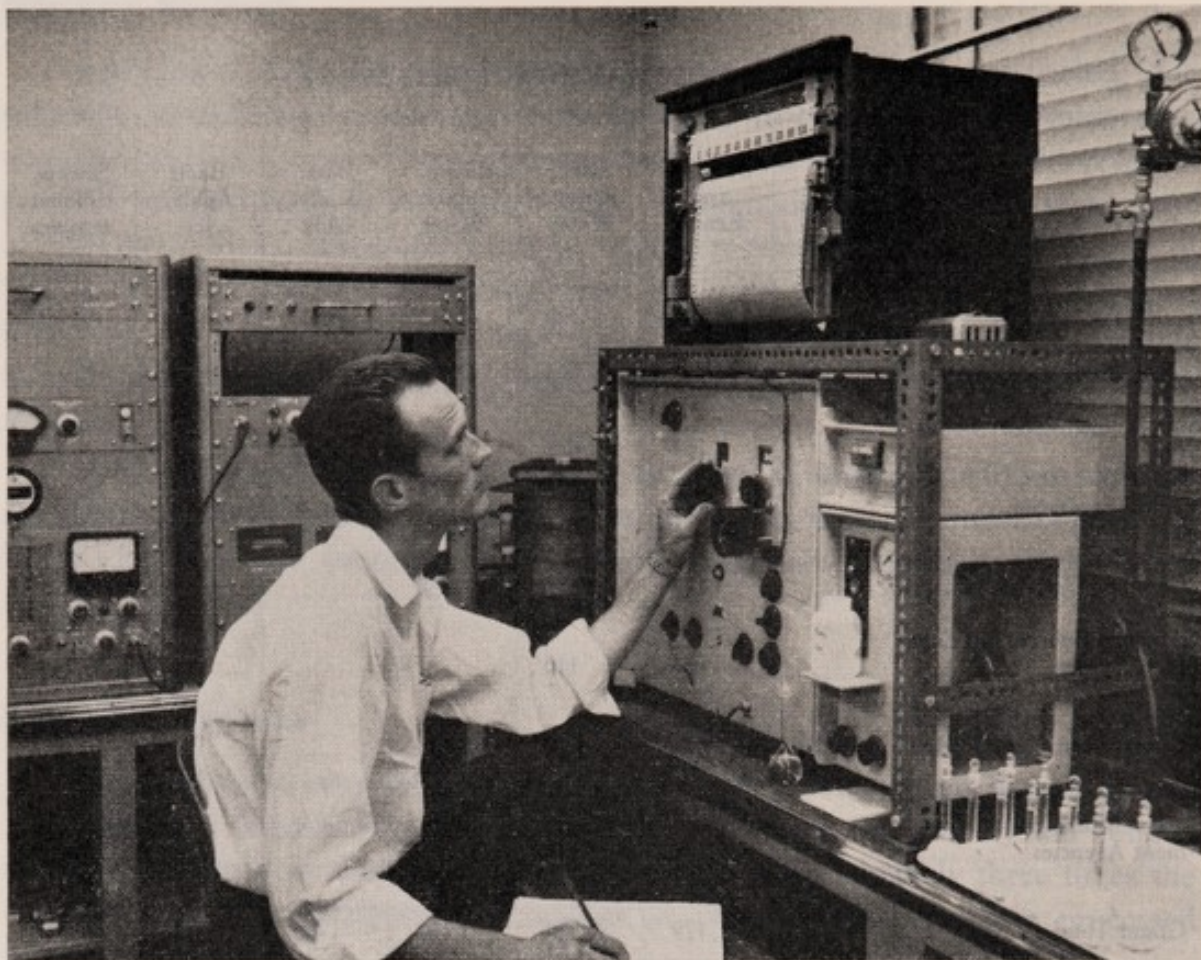
### Policy

1. As a result of the resolution passed in the General Assembly of the United Nations in November 1959, Canada offered to make available analytical facilities for the measurement of radioactive fallout in samples collected in foreign countries.

2. Revised Atomic Energy Control Regulations were issued during 1960-61. These included a new Health Safety Precautions section prepared by the Radiation Protection Division.

3. An agreement was reached between this department and Atomic Energy of Canada Ltd., that responsibility for environmental monitoring outside the boundaries of reactor sites should belong to a governmental health agency.





A technician employed at the Radiochemical Laboratory of the Radiation Protection Division adjusts an electronic machine which "counts" the radioactivity of a Strontium-90 sample extracted from milk powder which has been ashed. This work is part of the Division's fallout measurement program.

4. Revised Recommendations of the International Commission on Radiological Protection were published in 1959. These contain a new concept of maximum permissible exposure based on cumulative doses received in 13 and 52 week periods. The recommendations serve as the basic standard in the work of the Radiation Protection Division.

### **Accommodation**

The first part of a new building to house the complete Radiation Protection Division in the Riverside Drive area was turned over to the division late in the year. Preliminary drawings and cost estimates for the main building were completed. It is expected that construction will begin in 1961.

### **Programs**

During 1960-61, 369 applications for radioactive materials to be used in humans were reviewed by the Departmental Advisory Committee on the Clinical Use of Radioisotopes. Of these four were for limited general licences.



### **Isotope and X-Ray Utilization and Safety**

1. One thousand and forty-nine applications for radioisotope licence were processed during 1960-61. Of these 395 were for research purposes in universities, etc., 215 were for industrial purposes, 369 were for medical purposes and 70 were miscellaneous e.g. civil defence training programs, etc.

2. Special recommendations concerning the use and safe handling of radium, industrial radiography sources, electron tubes containing radioactivity, static eliminating brushes, and tritium as a luminizing agent were prepared for the Atomic Energy Control Board.

3. Two hundred and ten licensed groups were inspected by members of the field inspection team and recommendations were made when appropriate to provide more adequate radiation protection. Eighteen accidents involving radioactive materials were reported and investigated during 1960-61. Eight persons were suspected of having received external exposure in excess of the recommended maximum permissible limit as a result of these accidents.

4. Although the use in Canada of X-ray equipment is not controlled by regulations, there is an increasing awareness by radiologists and X-ray workers of the possible radiation hazards associated with their equipment. Thirty X-ray surveys were carried out by request during 1960-61.

5. The film monitoring service continued to grow during 1960-61 and by the end of the year was extended to about 11,000 radiation workers in Canada. Individual punch card records are maintained for each worker to show his continuing and cumulative radiation exposure.

6. Work with the Total Body Monitor unit was just beginning at the end of the year. The unit will be a valuable tool in the follow-up of persons who are suspected of having been exposed to possible internal contamination with radioactive material.

### **Radioactive Fallout**

The program of air, rain and soil collection arranged with the Meteorological Services Branch of the Department of Transport reached operating level during 1960-61. Samples are collected from 24 meteorological stations distributed across Canada and into the far north. To date measurements of total fission product activity only have been made on the air rainfall samples. The results of these measurements are released in quarterly statements and also included in an annual report. During 1960 the nation-wide monthly average concentration of fission products in the air showed a rise in the spring to a value of  $0.46 \frac{\text{d.p.m.}}{\text{m}^3}$

in April, and decreased again to a minimum of  $0.15 \frac{\text{d.p.m.}}{\text{m}^3}$  in October. Similarly

the deposition of fission products in precipitation showed a rise in the spring reaching a high of  $11.14 \text{ mc./mi}^2$  in June, and decreased steadily to a minimum of  $2.5 \text{ mc./mi}^2$  in December.



The collection of powdered milk samples through the co-operation of the Department of Agriculture was continued throughout 1960-61. These samples were analyzed for strontium-90. The monthly average for the fifteen station network remained nearly constant at about 15 micro curies  $\text{Sr}^{90}$  per gram calcium during the first five months of the year and then decreased to about 9 micro curies  $\text{Sr}^{90}$  per gram calcium for the last five months.

A revised human bone sampling program was proposed which restricted bone type to vertebral bodies and allocated the desired number of samples by age groups to various regions in the country. Bone specimens are analyzed for strontium-90. No results are available for samples collected during 1960.

Acceptances of Canada's offer of analytical assistance under the United Nations radioactive fallout study were received from the Union of Burma and from Pakistan.

### **Safety of Nuclear Reactors and Devices**

1. A member of the division continued to serve as health representative on the Atomic Energy Control Board's Reactor Safety Advisory Committee.

2. Initial steps were taken towards the gradual take-over from Atomic Energy of Canada Limited of the responsibility for environmental monitoring beyond reactor site boundaries.

3. Environmental monitoring in terms of daily air samples and monthly milk powder samples collected in the neighbourhood of the McMaster University reactor was instituted during 1960-61.



## **MEDICAL ADVISORY SERVICES**

### **CIVIL AVIATION MEDICINE DIVISION**

For the past 15 years the Civil Aviation Medicine Division has been administering the medical program for the Department of Transport, Air Services Branch. Over this period the growth in civil aviation has been so phenomenal that today the physical condition of almost 19,000 civil pilots ranging from the airline captain to the private pilot using the airways for pleasure or business is closely and constantly watched by a large team of medical men and their specialist advisers.

The chief of the division and his consultants in Ottawa are provided with reports and opinions by some 425 civil aviation medical examiners working with the division's six Regional Medical Officers who are gradually assuming a much greater responsibility in the overall program and who have as their advisers many highly qualified doctors on seven Regional Medical Consultant Boards.

The division is constantly reviewing the medical requirements for aviation personnel and is actively represented by the chief of the division in the International Civil Aviation Organization of which Canada has long been a member state.

Medical advice to other government departments and associated agencies on medical problems related to the health, safety and comfort of aircrew, groundcrew and airline passengers has continued and the medico-legal aspects of aircraft accident investigations continues to be of prime interest.

The original one-day seminars which constituted the Regional Conferences for Civil Aviation Medical Examiners have been lengthened to four-day sessions of study and discussion.

Research in civil aviation medicine is maintained on a liaison basis with the National Research Council, the Defence Research Medical Laboratories and the Institute of Aviation Medicine of the Royal Canadian Air Force.

### **CIVIL SERVICE HEALTH DIVISION**

The division in its fourteenth year of operation has continued to discharge its primary responsibility of providing a comprehensive occupational health program to federal government employees.

#### **Staff Changes**

The medical officer vacancy created by the appointment of one of our senior medical officers as chief of the Blindness Control Division was filled by open competition. The former incumbent of this position continues to serve as a consultant in ophthalmology to this division.



The division's establishment of eighty-two personnel was unchanged during the year comprising six medical officers including the psychiatrist, a psychologist, a consultant in social service—still vacant, a supervisor and assistant supervisor of nursing counsellors, 48 nursing counsellors and 24 non-professional personnel. Retirements, resignations, transfers, etc., during the fiscal year have accounted for a turnover of five nursing counsellors. All of these vacancies have been filled by suitably qualified public health nurses.



Nurses employed by the Civil Service Health Division are on duty at various health units to assist civil servants in matters of health. Most persons who report to a health unit receive minor treatment and return to work. A few are referred to the family physician for further treatment.

### **Administration**

The division has continued to administer three broad classes of service from its headquarters in No. 3 Temporary Building. First, a basic advisory and consultant service to all departments on health and welfare problems including, for employees outside Ottawa, arrangements for essential clinical services required by statute or requested by departments employing, where available, the facilities of other divisions of this department, the Department of Veterans Affairs or occasionally private physicians on a fee-for-service basis. Secondly, through its Medical or Health Centre located at headquarters the division administers advisory, diagnostic and emergency medical services to more than 38,000 civil servants and other federal government employees in the Ottawa area. Thirdly, through



24 full-time and four part-time health units nursing counsellor service is provided in whole or in part to approximately 36,000 employees also within the Ottawa area. In the conduct of these classes of service the division has liaised with and called freely upon the resources of other divisions of this department, notably, the Public Health Engineering Division; Quarantine, Immigration Medical and Sick Mariners Services; and the Indian and Northern Health Services Directorate.

### **Medical Centre Services**

Table 20 summarizes in detail the clinical services performed during the year. It will be observed that referrals from health units, physical examinations and psychological assessments required by statute and periodic voluntary examinations requested by departments for special employee groups constitute the bulk of the clinical work at the Medical Centre. The special groups include employees proceeding to isolated areas; employees on summer field work; employees engaged in hazardous occupations including the handling of radioactive materials; selected groups of senior administrative personnel together with pre-employment examinations in cases where an assessment of physical fitness for the job is required; and lastly, special eye examinations on employees whose work demands a high degree of visual acuity.

The volume of medical work required by statute increases annually, especially that undertaken for the Departments of External Affairs and Trade and Commerce and to a lesser extent other departments on behalf of foreign service personnel and their dependents prior to and on return from routine postings abroad. This increase is largely accounted for by the opening of new missions abroad and the increased staff requirements of existing ones. Included in this category also are the physical examinations required of Colombo Plan assignees.

Early in the fiscal year the Immigration Medical Officer temporarily posted to New Delhi completed his tour of duty and returned to Canada. Prior to his return and at the request of the Departments of External Affairs and Trade and Commerce this Medical Officer made a thorough survey of some eleven Asian posts, the purpose of which was to study at first hand the factors responsible for the different kinds and degrees of hardship encountered by Canadian foreign service personnel and to submit proposals designed to alleviate or provide appropriate assistance to personnel serving at these hardship posts. This comprehensive report has provided a wealth of information on conditions such as climate, isolation, local conditions and health at each of these posts, all of which has been most beneficial to this division in its medical advisory capacity. This Medical Officer is presently undertaking similar surveys of hardship posts in Africa, the Middle East, Europe and Latin America.

The total number of immunizations administered at the Medical Centre during the year increased by more than 50 per cent. In all, as shown in Table 20 5,854 immunizations of various types were given to 2,903 individuals, largely to foreign service personnel and their dependants proceeding abroad or to isolated regions. The increase is to be noted in all procedures, but particularly in the



number of vaccinations against poliomyelitis which, of course, are in addition to the wide scale program described later in this report under "Special Activities".

Once again there has been an increasing demand for the consultant services of both the psychiatrist and psychologist. The former has continued to develop a broad mental health program for federal government employees and during the year he has addressed no fewer than twelve different groups of personnel and administrative officers from five different government departments on the management of employee emotional health problems. A total of 504 psychiatric consultations were held representing an 11 per cent increase over the previous fiscal year. The psychologist has been hard pressed to handle the heavy volume of psychological assessments referred from the health units, the clinical staff of the Medical Centre and departmental personnel officers. Psychological assessments of foreign service personnel have been extended to include foreign service officers from the Departments of External Affairs, Trade and Commerce, and Citizenship and Immigration. He has continued to conduct a large proportion of interviews in health units, particularly for employees now located at some distance from the centre of the City. This practice avoids employee loss of time in visiting the Medical Centre. In all, the psychiatrist has conducted some 789 interviews, of which 602 have been first visits. Each year an effort is made to emphasize some special aspect of the psychologist's work. This year nursing counsellors have been encouraged to make more referrals from civil servants in the older age groups—30 to 55 years of age—whose job frustrations are causing personality deterioration. The results have been gratifying in that the discovery of "untapped resources" has given new hope to these individuals.

The Certificate Review Section, located in No. 1 Temporary Building has continued to function as an integral part of the Medical Centre. Medical officers on a monthly rotating basis give overall medical direction to the work of this section. A total of 9606 Certificates of Disability for Duty and 91,383 Physical Examination Record forms were reviewed and processed. Arrangements were made for 453 medical examinations outside Ottawa utilizing the previously noted resources. In the main medical examinations were arranged for assessment of physical fitness for job suitability at departmental request, foreign service personnel including Colombo Plan assignees, extension of employment beyond the age of 65, and confirmatory examinations in connection with retirement from the service on medical grounds. The annual statistical report on Illness in the Civil Service, now being published on a calendar rather than fiscal year basis, is compiled by the Public Health Section of the Bureau of Statistics from sick leave certificates furnished by this division.

Table 21 summarizes the retirements from the service on medical grounds according to disability for the year 1960-61.

### **Health Unit Services**

Table 22 shows the location and total number of personnel supervised by the 24 full-time and four part-time health units in operation at the close of the fiscal year. One new two-nurse unit was opened in July in the Sir Charles



Tupper Building on Riverside Drive to serve employees located in several of the new buildings in that area. Future plans for health units in this area include a one-nurse unit for the new Post Office Building and a part-time nursing service for National Research Council employees in the new Communications Building, both nearing completion. Every effort will be made to staff these new units from our existing establishment.

Table 23 summarizes by months the services performed by these 28 health units in operation during the past fiscal year. Health teaching, counselling and first-aid services have been provided to almost 36,000 federal government employees. The index of participation of approximately 51 monthly visits per 100 personnel supervised is based on an employee population of close to 33,000 receiving full-time nursing counsellor service.

### **Staff Education**

As in previous years an active staff education program has been maintained for all nursing counsellors. The main project undertaken comprised visits to some 25 of the health and welfare agencies in Ottawa and Hull. These visits served to strengthen the ties between our nursing counsellor service and the various health and welfare agencies.

### **Special Activities**

One of the highlights of the year's activities was the conduct of a large scale vaccination program against poliomyelitis for federal government employees in the Ottawa area. At the close of the fiscal year 58 clinics had been held in 18 selected health units, at which 14,899 employees had received 24,975 inoculations. Clinics will continue to be held until all employees desirous of being vaccinated have received the primary series of three inoculations, or booster doses in the case of employees previously vaccinated. Every effort is being made to complete the program before the advent of the next poliomyelitis season.

Alcoholism today is one of our major social problems. Although there is no evidence to suggest that problem drinkers are more numerous in the public service than in any other segment of the working population, this division for the past four years, under the direction of the psychiatrist and in close cooperation with all government departments, has continued to give leadership to a program emphasizing early recognition, treatment and rehabilitation. In March senior personnel officers from all government departments again met with representatives of the Alcoholism Research Foundation and Alcoholics Anonymous to review the year's activities and make further plans to ensure continued progress in this field. Furthermore, the professional personnel of the Alcoholism Research Foundation began a series of conferences with the nursing counsellor staff of this division emphasizing the role of the nursing counsellor in handling cases of problem drinking.

Towards the close of the fiscal year the Department of Transport requested assistance from this division in the matter of providing physical standards and



medical requirements for marine pilots employed in districts for which the Minister of Transport is pilotage authority. The division forwarded specific recommendations respecting medical examinations of apprentice and marine pilots together with a draft of proposed minimum physical standards. The Department of Transport is presently studying these proposals which, if acceptable in whole or in part, may be considered for inclusion as an amendment to the Canada Shipping Act or as a regulation under the authority of this act.

TABLE 20  
MEDICAL CENTRE STATISTICS

Fiscal Year 1960-61

Number of Visits		
Total		8858
First visit	3874	
Repeat visit	4984	
Visits by Sex		
Total		8858
Male	6256	
Female	2602	
Analysis of Visits		
Physical Examinations		2696
Pre-employment, periodic, P.S.S.A.	346	
Foreign Service, isolated duty, postings, etc.	777	
Referrals—voluntary, department, health unit, etc.	1573	
Consultations, interviews, etc.		6062
Psychological	789	
Psychiatric	508	
Special, eye, x-ray, immunization	4765	
Accidents		100
Industrial	14	
Non-industrial	86	
Immunizations		
Total number of employees immunized		2903
Total immunizations		5854
Smallpox	1107	
T.A.B.T.	1176	
T.A.B.	883	
Cholera	345	
Typhus	198	
Yellow Fever	779	
Polio (Salk)	1281	
Other	85	
Disposal		
Total		8858
Returned to work	8806	
Sent home	52	
Referred to Family Physician		92
Total Laboratory Procedures		4040
X-Ray		
Total		4088
Chest	2310	
Chest (photoröntgen unit)	1360	
Other	418	



TABLE 21

## RETIREMENTS FROM SERVICE—ACCORDING TO DISABILITY

Fiscal Year 1960-61

Male 122 — Female 47 — Total 169

Cause of Disability	Age Groups					Total
	Under 40	40 to 44	45 to 49	50 to 54	55 to 59	
Infective and Parasitic.....	0	1	0	2	2	5
Neoplasms.....	1	1	2	4	4	12
Allergic, endocrine Metabolic, nutritional	1	2	1	1	3	8
Blood and Blood Forming.....	1	0	0	0	0	1
Mental psychoneurotic personality.....	6	2	3	8	10	29
Nervous systems and sense organs.....	2	1	9	4	10	26
Circulatory.....	1	1	5	11	30	48
Respiratory.....	0	0	1	3	7	11
Digestive.....	0	1	0	2	2	5
Genito-urinary.....	0	0	1	0	1	2
Pregnancy, childbirth.....	0	0	0	0	0	0
Skin and Cellular.....	0	0	0	1	0	1
Bones and organs of movement.....	2	2	0	6	7	17
Congenital Malformation.....	0	0	1	0	0	1
Symptoms and Ill Defined.....	0	0	0	1	1	2
Accidents and results of old injuries.....	1	0	0	0	0	1
Total.....	15	11	23	43	77	169



TABLE 22

## HEALTH UNIT LOCATIONS

Health Unit No.	Locations	Total Personnel Supervised by Units
1	No. 2 Temporary Building .....	2,897
2	Citizenship Building .....	1,098
3	No. 8 Temporary Building .....	836
*3A	Plouffe Park (1 day only) .....	169
4	Trade & Commerce Building .....	969
5	Metcalfe Building .....	892
6	"C" Building, National Defence .....	3,547
7	Geological Building, Booth Street .....	2,022
8	Jackson Building Annex .....	1,632
9	Hunter Building .....	1,471
10	No. 6 Temporary Building .....	872
11	D.V.A. Memorial Building .....	1,310
12	Bureau of Statistics .....	3,335
13	Victoria Island .....	700
14	Connaught Building .....	881
15	Blackburn Building .....	2,488
*16	Daly Building (afternoons only) .....	1,142
17	National Research Council (Sussex St.) .....	886
18	National Research Council (Montreal Rd.) .....	1,326
*18A	National Research Council, Radio Bldg., Montreal Rd. (mornings only) .....	344
*18B	Rideau Annex Bldg. (Alta Vista Drive) (1 day only) .....	513
19	Defence Research Board (Shirley Bay) .....	547
20	Confederation Building .....	2,251
21	No. 10 Cottage Row, Rockcliffe .....	1,603
22	No. 5 Temporary Building .....	561
23	75 St. Patrick St. (Old Printing Bureau) .....	500
24	Sir Charles Tupper Building (Riverside Drive) .....	984
25	Neatby Memorial Bldg. (Carling Ave.) .....	1,218
Total		36,994

\* Part Time



TABLE 23

## HEALTH UNIT STATISTICS

By Months, Fiscal Year 1960-61

	Total	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
Number of Personnel Under Supervision.....		36,477	35,897	35,983	36,356	36,011	35,992	36,063	36,537	36,152	36,167	36,873	36,994
Number of Health Units in Operation.....		24	24	24	25	25	25	25	25	25	25	25	25
Number of Visits—													
Total.....	198,081	14,429	16,618	16,902	13,498	14,994	16,037	17,046	16,892	17,084	17,879	17,537	19,165
First Visit.....	145,567	10,371	12,116	12,375	9,912	11,039	11,873	12,755	12,452	12,497	13,180	12,810	14,187
Repeat Visit.....	52,514	4,058	4,502	4,527	3,586	3,955	4,164	4,291	4,440	4,587	4,699	4,727	4,978
Visits by Sex—													
Total.....	198,081	14,429	16,618	16,902	13,498	14,994	16,037	17,046	16,892	17,084	17,879	17,537	19,165
Males.....	95,709	7,005	7,945	7,976	6,522	7,212	7,967	8,349	8,233	8,247	8,547	8,403	9,303
Females.....	102,372	7,424	8,673	8,926	6,976	7,782	8,070	8,697	8,659	8,837	9,332	9,134	9,862
Nature of Visits—													
Total.....	198,081	14,429	16,618	16,902	13,498	14,994	16,037	17,046	16,892	17,084	17,879	17,537	19,165
Illness.....	80,293	6,169	6,727	6,660	5,530	6,107	6,447	6,529	6,682	7,080	7,097	7,324	7,941
Accident.....	16,333	1,052	1,417	1,583	1,393	1,432	1,300	1,286	1,433	1,309	1,335	1,385	1,408
Consultations.....	17,406	1,233	1,782	1,764	1,321	1,365	1,426	1,426	1,428	1,204	1,546	1,479	1,517
Return-to-work visits.....	84,049	5,975	6,692	6,895	5,254	6,090	6,864	7,890	7,349	7,491	7,901	7,349	8,299
Classification of first visits—													
Total.....	145,567	10,371	12,116	12,375	9,912	11,039	11,873	12,755	12,452	12,497	13,180	12,810	14,187
Respiratory.....	44,442	3,655	2,802	2,342	1,495	1,704	3,282	5,188	4,120	4,558	4,751	4,804	5,741
Digestive.....	24,080	1,484	2,138	2,459	2,125	2,733	2,202	1,726	1,937	1,968	1,877	1,696	1,735
Skin and Cellular.....	8,266	511	827	884	880	842	618	565	614	638	646	604	637
Menstrual Disorders.....	6,736	485	631	700	568	568	585	523	563	529	532	505	534
Emotional Disorders.....	2,021	128	200	196	146	155	185	157	172	176	175	175	156
Contagious Diseases.....	7,170	32	34	18	9	13	3	6	8	9	12	15	11
Accidents—Non-industrial.....	7,574	454	650	745	714	709	640	555	640	613	628	638	588
Accidents—Industrial.....	5,386	384	450	493	389	431	406	443	487	425	489	449	540
Ill defined and all others.....	46,892	3,238	4,384	4,538	3,573	3,884	3,952	3,592	3,911	3,581	4,070	3,924	4,245
Disposal—													
Total.....	198,081	14,429	16,618	16,902	13,498	14,994	16,037	17,046	16,892	17,084	17,879	17,537	19,165
Sent Home.....	5,308	391	375	383	333	354	440	458	460	456	435	443	780
Returned to Work.....	192,773	14,038	16,243	16,519	13,165	14,640	15,597	16,588	16,432	16,628	17,444	17,094	18,385
Referrals—													
Total.....	10,953	768	911	1,050	851	957	899	840	882	769	1,028	950	1,048
Referred to Health Centre.....	1,987	149	175	212	165	186	142	133	150	123	201	177	174
Referred to Family Physician.....	7,816	555	647	718	604	667	651	620	636	565	719	657	777
Referred to Community Agencies.....	1,150	64	89	120	82	104	106	87	96	81	108	116	97
Index of Participation— Average Monthly Number of Health Unit Visits per 100 personnel supervised (Full Time).....	51												



## QUARANTINE SERVICE

The Quarantine Service functions under the authority of the Quarantine Act and Regulations to exercise control measures to reduce the danger of the introduction of quarantinable diseases into Canada by way of international traffic. The inspection, immunization, vector control and other measures applied to such traffic are in accordance with the International Sanitary Regulations of the World Health Organization of which organization Canada is an active member. The major quarantinable diseases are: smallpox, cholera, plague, yellow fever, typhus and relapsing fever. They exist in endemic and epidemic proportions in diverse areas of the world. Due to effective control measures, no cases of quarantinable disease were introduced into Canada during the year under review. Several close contacts of smallpox required close surveillance but were found to have been adequately protected by vaccination and remained healthy.

The rapid expansion of air travel has created new problems for the Service. It has been necessary to increase facilities and staff at the international airports to cope with the large numbers of aircraft and persons arriving from overseas points. During the year new facilities were brought into operation at the Montreal, Ottawa and Halifax International Airports.

### **Smallpox**

Smallpox again proved to be the most important quarantinable disease from a control point of view. The disease remains endemic in several areas of the world and major epidemics occurred in Asia, Africa, South America and Europe. Many of the outbreaks resulted from international travel. With modern air travel, persons can travel from infected areas to non-infected areas well within the incubation period of the disease and manifestations of smallpox may only develop several days after arrival. It is apparent that control measures must be adequate or smallpox will gain entry to this country. Immunity as a result of vaccination and periodic revaccination remains the only effective measure for controlling this disease, and careful check of all persons entering the country from abroad must be maintained to ensure that all persons are effectively vaccinated or kept under close surveillance. During the year under review, 1,152,627 persons arrived in Canada and were either in possession of certificates or were vaccinated on arrival. Five hundred and forty-eight persons were placed under the surveillance of medical officers of health throughout the country.

### **Plague**

As a result of effective international control measures exerted through the World Health Organization, there has been a dramatic reduction in the incidence of bubonic plague throughout the world. In 1950, 44,000 cases were reported, while in 1960, only 271 cases were reported. During the year under review, outbreaks of plague occurred in South America, Asia and Africa and localized cases occurred in other areas of the world.

Bubonic plague results from the bite of the infected rat flea. The common reservoir of infection is the rat. Rat populations on vessels have been effectively reduced by the application of international control measures. All vessels subject to



TABLE 24  
SHIPS BOARDED BY QUARANTINE OFFICERS  
Organized Quarantine Stations 1960-61

Station	Vessels Inspected	Personnel Inspected				Port Totals
		Crew	Passengers	Stowaways	Others	
Halifax N.S.	682	54,969	53,075	5	1	108,050
Sydney N.S.	101	4,416	13			4,429
Saint John N.B.	382	15,766	876	5	5	16,652
Quebec Que.	2,574	144,861	95,810	33	18	240,722
Victoria B.C.	799	40,306	12,474	11	6	52,797
St. John's Nfld.	266	14,559	1,669	2	22	16,252
Totals	4,804	274,877	163,917	56	52	438,902

TABLE 25  
SHIPS INSPECTED  
Unorganized Ports  
1960-61

Station	Vessels Inspected	Personnel Inspected			Total Personnel Inspected
		Crew	Passengers	Stowaways	
Baddeck, N.S.	1	26			26
Bay Roberts, Nfld.	2	44			44
Bell Island, Nfld.	138	5,777	120		5,897
Botwood, Nfld.	17	631	1		632
Churchill, Man.	52	1,862	7		1,869
Cornerbrook, Nfld.	31	1,301	47		1,348
Dalhousie, N.B.	28	1,173	35		1,208
Digby, N.S.	4	89			89
Fortune, Nfld.	1	15			15
Gaspé, Que.	1	430	485		915
Grand Falls, Nfld.	27	721			721
Harbour Buffet, Nfld.	2	29			29
Harbour Grace, Nfld.	27	484			484
Hare Bay, Nfld.	10	275			275
Kitimat, B.C.	31	1,202	4		1,206
Louisburg, N.S.	2	83			83
Lunenburg, N.S.	2	53			53
Matane, Que.	3	80			80
Montague, P.E.I.	3	85			85
Nanaimo, B.C.	1	35			35
Newcastle, N.B.	1	39	2		41
Ocean Falls, B.C.	4	143			143
Parrsboro, N.S.	2	33			33
Pictou, N.S.	1	28			28
Port Alberni, B.C.	17	649	2		651
Port Alice, B.C.	8	284			284
Port Hawkesbury, N.S.	4	125	1		126
Port McNeil, B.C.	19	881		1	882
Prince Rupert, B.C.	15	558			558
Quatsino, B.C.	24	1,098	9		1,107
Tahsis, B.C.	7	237	1		238
Totals	485	18,470	714	1	19,185



TABLE 26  
CONTROL OF RATS ON VESSELS  
1960-61

Port	Vessels Inspected and Fumigated and Deratting Certificates Issued	Vessels Inspected and Exemption Certificates Issued	Vessels Inspected and Remanded or Time Extended	Vessels Inspected and Certificates Endorsed or Related Action	Total Vessels Inspected	Rodents Recovered	
						Rats	Mice
St. John's, Nfld.		11	4		15		
Sydney, N.S.		11			11		
Halifax, N.S.	2	47	90		139	1	
Saint John, N.B.	1	54	4		59	40	
Baie Comeau, Que.		3		1	4		
Montreal, Que.		135	8	51	194	5	
Port Alfred, Que.		50			50		
Quebec, P.Q.		21		3	24		
Seven Islands, Que.		4			4		
Three Rivers, Que.		2			2		
Vancouver, B.C.	9	193	5	556	763	365	
Victoria, B.C.		20		138	158		
Totals	12	551	111	749	1,423	411	

TABLE 27  
INSPECTION OF AIRCRAFT SUBJECT TO QUARANTINE  
1960-61

Airport	No. of Aircraft	No. of Crew	No. of Passengers	Total Persons
Dorval (Montreal), Que.	3,136	30,135	220,645	250,780
Edmonton, Alta.	132	1,248	9,908	11,156
Frobisher, N.W.T.	34	394	1,660	2,054
Gander, Nfld.	5,215	39,788	248,886	288,674
Goose Bay, Nfld.	644	5,508	32,450	37,958
Halifax, N.S.	96	912	6,885	7,797
Malton, Ont.	873	5,797	44,951	50,748
Moncton, N.B.	57	461	2,041	2,502
Ottawa, Ont.	115	982	2,981	3,963
Sidney, B.C.	4	30	220	250
Stephenville, Nfld.	33	344	1,515	1,859
Sydney, N.S.	65	535	3,148	3,683
St. John's, Nfld.	17	185	4	189
Trenton, Ont.	55	461	252	713
Vancouver, B.C.	424	3,517	20,854	24,371
Winnipeg, Man.	167	1,569	6,822	8,391
Totals	11,067	91,866	603,222	695,088



quarantine are routinely inspected for rat harbourage and infestation. These conditions when discovered are corrected by rat proofing, fumigation and trapping procedures. After inspection, rodent-free vessels are issued international exemption certificates valid for six months. Deratting certificates, also valid for six months, are issued to vessels which have been effectively fumigated. During the year a number of vessels arrived in Canada grossly infested with rats and these vessels were effectively fumigated before being released from quarantine.

Table 26 "Control of Rats on Vessels" summarizes the work carried out in respect to rodent inspection and control on ships.

### ***Typhus and Relapsing Fever***

These diseases are spread from person to person by the bite of the body louse and control measures are directed toward the elimination of louse infestation. All persons arriving from endemic and epidemic areas are carefully examined for evidence of disease and lice. Facilities are maintained at all major seaports and airports for rapid delousing. During the year under review, typhus was prevalent in a number of countries in Europe, Asia, Africa, South America and Central America. Relapsing fever occurred in specific areas in Africa and in South America and one outbreak in Ethiopia caused over 3,000 deaths.

### ***Cholera***

During the year, cholera was reported in epidemic proportions in several Asian countries. However, the chlorination of water, pasteurization of milk, the sanitary disposal of sewage, and the hygienic handling of foodstuffs have reduced the hazard of cholera being introduced into Canada to the point where special preventive measures are no longer required except to provide immunization for persons entering infected areas. Cholera vaccine is available throughout Canada and inoculations may be obtained from most physicians or municipal health departments.

### ***Yellow Fever***

Canada is not a receptive area for yellow fever and climatic conditions are not suitable for the propagation of the specific species of the mosquito responsible for the spread of the disease, except in those parts of Ontario and Nova Scotia lying south of the 45th parallel of latitude during the period April 1st to September 30th. Canada co-operates with other countries and the World Health Organization in the application of international vector control measures on conveyances and persons from endemic areas, and in the vaccination of persons who are proceeding to receptive areas in other countries. Yellow fever inoculations are available at 17 strategically located centres across Canada. An additional centre is maintained in Europe at No. 1 Air Division, RCAF. These centres have facilities for storage and administration of the vaccine in accordance with the World Health Organization regulations. Valid international certificates of vaccination against yellow fever are recognized by member nations of the World Health Organization and are only obtainable at these centres in Canada. During the year, 9,833 inoculations were performed.



During the year under review, yellow fever was reported in the northern half of South America, and the central portion of Africa.

### **Leprosy in Canada**

Leprosy was apparently originally introduced into Canada in 1815 by early settlers from whom a localized outbreak of approximately 300 cases developed in north eastern New Brunswick. The first facilities for the treatment of leprosy were provided in the province of New Brunswick in 1844 on Sheldrake Island in the Miramichi River. In 1849 the patients were transferred to Tracadie, New Brunswick, where special buildings were constructed for their accommodation. In 1880, the facilities were acquired by the federal government which assumed responsibility for the treatment of leprosy at the request of the province of New Brunswick. The buildings were destroyed by fire in 1943 and subsequently a contract was signed by the federal government and the religious hospitallers of the Hotel-Dieu de St. Joseph of Tracadie, resulting in the federal government contributing towards the cost of erecting a new and modern fireproof wing attached to the General Hospital of the order. The accommodation consists of duplicate suites, each of which contain six private rooms, and recreational facilities. Hospital care was assumed by the sisterhood on a per diem basis under the medical care and direction of a departmental medical officer especially trained in the diagnosis and treatment of leprosy.

A leprosarium existed from 1892 on the west coast of Canada on D'Arcy Island and was subsequently transferred to Bentinck Island in 1924. These facilities became obsolete and were closed in 1959 and all inpatient treatment has been carried out at Tracadie since this date.

At the end of the fiscal year, five patients were receiving active treatment at Tracadie and seventeen were receiving treatment at home under the surveillance of local medical officers of health. During the year, one new case of leprosy was discovered in Canada. This patient, a visitor to Canada, is presently undergoing treatment in the Province of Alberta pending completion of arrangements for returning him to his homeland.

Statistics for the fiscal year 1960-61 are shown in Table 28 "Leprosy in Canada".

TABLE 28  
LEPROSY IN CANADA  
1960-61

#### *Inpatients (Tracadie, N.B.)*

Inpatients as of April 1, 1960 .....	—5
Admitted during the year .....	—0
Died during the year .....	—0
Discharged during the year .....	—0
Remaining in hospital as of March 31, 1961 .....	—5
Cases discovered during the year and receiving treatment under provincial jurisdiction .....	—1

#### *Outpatients*

Continuing treatment at home under medical supervision .....	—16
Total known cases in Canada .....	—22



### **Immigration Medical Service**

The functions of the Immigration Medical Service are based upon both the Immigration Act and Department of National Health and Welfare Act. The first provides for the medical and physical examination of those seeking admission to Canada and for the treatment of certain classes of persons after arrival in Canada. The second assigns to the Department of National Health and Welfare responsibility for the inspection and medical care of immigrants.

The nature of the work of the service produces a close association with the Department of Citizenship and Immigration. Medical officers certify, under the appropriate subsection of Section 5 of the Immigration Act, those persons in whom abnormalities are found. In addition, in the case of immigrants certified, the Immigration Medical Service advises the Department of Citizenship and Immigration of the significance of disabilities in relation to the immigrant's future in Canada.

The service is administered by a headquarters section which is responsible for the whole operation and for liaison with provincial and local health authorities in medical matters pertaining to immigrants. The operational units consist of a European Section, a Preliminary Screening Section and a Canadian Section.

The European Section is staffed by medical officers rotated from Canada. Its offices, closely associated with those of the Immigration Branch of the Department of Citizenship and Immigration, are situated in many of the capitals and larger cities of Continental Europe and the British Isles. The administrative headquarters is in London, where the establishment includes a consultation service in general medicine, chest diseases and psychiatry, as well as a local examining unit.

At all of these centres, the medical examinations of intending immigrant are conducted without charge. By the use of departmental facilities, x-rays are also provided free in the offices in the British Isles, The Hague and Paris.

Especially appointed physicians called roster doctors are authorized to examine emigrants in centres which are remote from Canadian offices and where the volume of examinations is small. The work of each is supervised by the physician in charge of the nearest Canadian office.

Medical officers in charge of certain European offices, in addition to their regular duties, serve as attaches to the Canadian Embassies. They keep in close contact with the local health authorities and are constantly in a position to provide the embassies and their headquarters with medical advice based on current knowledge of local health conditions. They also represent Canada at meetings and conventions and make their reports available for government use.

During the past year, travelling teams of Canadian medical officers carried out examinations in Avignon, Bordeaux, Madrid, Cairo, Latina, Malta, and The Azores.

The medical preliminary screening of prospective immigrants is conducted by the Preliminary Screening Section, so that persons living in countries which are not served by Canadian medical officers may be reasonably assured that they will comply with medical requirements when they are examined on arrival at Canadian ports. The medical examinations are performed by doctors selected by officers of



the Department of External Affairs, by representatives of the British Foreign Office, by officers of The Department of Citizenship and Immigration and by a medical officer of this division previously posted to South-East Asia.

Medical evidence is submitted to the Preliminary Screening Section from all parts of the world other than Western Europe. The reports and x-rays are reviewed and the appropriate representative of the Department of Citizenship and Immigration is informed whether the individual is likely to meet Canadian immigration medical standards.

The work of the Preliminary Screening Section has grown continuously since its establishment in 1955. In that year, 13,000 cases were reviewed. During the past year 31,842 cases were assessed. The activities of the Section are shown in Table 32.

Canadian citizens, persons having Canadian domicile and the accredited representatives of other governments or international organizations are exempted from medical examination on arrival at Canadian ports. The Canadian Section of the Immigration Medical Service is responsible for the final medical examination and for the treatment, if indicated, of all other persons subject to immigration authority.

In order to facilitate the processing of immigrants who enter Canada by way of the United States of America, a medical officer of the Immigration Medical Service was posted during the year to Fort Erie and Niagara Falls, Ontario. At Lacolle, P.Q., a similar unit was in process of development but no permanent staff was appointed.

The movement from Europe to Canada of tuberculous refugees, begun in the previous year, was continued in the year under review by the arrival of a further 225 persons suffering from tuberculosis. They were accompanied by 256 dependents. These immigrants were carried in seven flights originating in Rome, Vienna and Bonn. Each flight was accompanied by a medical officer and two nurses of this division.



TABLE 29  
SUMMARY OF ACTIVITIES

Fiscal Year 1960-61

CANADA:

Immigrants medically examined and/or inspected .....	99,351
Non-immigrants medically examined and/or inspected .....	72,009
Certifications as "prohibited" under Sec. 5 (a) and (b) of the Immigration Act .....	229
Certifications as physically defective under Sec. 5 (c) .....	4,184

OVERSEAS:

Prospective emigrants medically examined and re-examined .....	97,007
<i>British Isles—</i>	
Prospective emigrants medically examined .....	20,281
Prospective emigrants medically re-examined .....	3,305
<i>Continent of Europe—</i>	
Prospective emigrants medically examined .....	57,918
Prospective emigrants medically re-examined .....	12,516
<i>Orient—</i>	
Prospective emigrants medically examined .....	2,235
Prospective emigrants medically re-examined .....	752
Certifications as "prohibited" under Sec. 5 (a) (b) and (i) of the Immigration Act .....	3,147
Certifications as physically defective under Sec. 5 (c) .....	12,727

ALL OTHER COUNTRIES:

Medically prescreened at Ottawa .....	31,842
Certifications as "prohibited" under Sec. 5 (a) (b) and (i) .....	501
Certifications as physically defective under Sec. 5 (c) .....	4,380

TABLE 30

IMMIGRATION MEDICAL EXAMINATIONS AND INSPECTIONS IN CANADA  
1960-61

Location	Immigrants	Non-Immigrants
Gander, Nfld. ....	425	988
St. John's, Nfld. ....	211	335
Sydney, N.S. ....	49	22
Halifax, N.S. ....	16,015	1,097
Halifax Airport, N.S. ....	459	1,139
Saint John, N.B. ....	264	101
Montreal, Que. ....	1,765	892
Quebec, Que. ....	29,014	13,995
Dorval, Que. ....	28,269	28,638
Malton, Ont. ....	5,065	7,385
Toronto, Ont. ....	1,317	113
Fort Erie and Outports, Ont. ....	1,492	2,956
Niagara Falls and Outports, Ont. ....	757	554
Winnipeg, Man. ....	367	13
Winnipeg Airport, Man. ....	324	545
Vancouver, B.C. ....	1,866	2,867
Vancouver Airport, B.C. ....	1,804	4,756
Victoria, B.C. ....	181	202
Others .....	9,707	5,411
Totals .....	99,351	72,009



TABLE 31  
DETAILS OF EXAMINATIONS—EXAMINATIONS OVERSEAS  
1960-61

	Examinations	Re-examinations
By Canadian Medical Officers in British Isles.....	18,663	2,978
By Roster Doctors in British Isles.....	1,618	327
By Canadian Medical Officers on the Continent.....	55,409	12,027
By Roster Doctors on the Continent.....	2,509	489
By Roster Doctors in the Orient.....	2,235	752
Total—1960-61.....	80,434	16,573
Total—1959-60.....	101,857	19,472
British Isles:		
By Canadian Medical Officers		
Belfast.....	1,027	183
Bristol.....	911	163
Glasgow.....	3,867	811
Leeds.....	1,775	395
Liverpool.....	2,017	397
London.....	9,066	1,029
By Roster Doctors		
Belfast Area.....	2	4
Bristol Area.....	126	16
Dublin Area.....	511	152
Eire Area.....	115	22
Glasgow Area.....	353	61
Leeds Area.....	170	24
Liverpool Area.....	80	5
London Area.....	261	43
Continent:		
By Canadian Medical Officers		
Athens.....	5,577	796
Berlin.....	1,340	252
Berne.....	1,245	119
Brussels.....	1,825	319
Cologne.....	4,998	1,209
Copenhagen.....	792	74
The Hague.....	3,667	622
Hamburg.....	2,473	463
Helsinki.....	402	66
Lisbon.....	585	536
Munich.....	1,372	391
Paris (including Avignon and Bordeaux).....	4,767	918
Rome.....	19,600	5,237
Stuttgart.....	2,682	556
Vienna.....	2,116	319
Others: Examinations by Canadian Medical Officers, (Refugee Program)		
Latina.....	940	39
Madrid.....	54	
Malta.....	115	5
Portugal and Azores.....	852	
Vienna.....	7	106
By Roster Doctors:		
Finland.....	325	86
France.....	6	1
Malta.....	150	85
Norway.....	359	57
Portugal.....	1,354	213
Sweden.....	315	47
Orient:		
By Roster Doctors		
Hong Kong.....	1,169	452
India.....	1,019	288
Pakistan.....	47	12
Total.....	80,434	16,573



TABLE 32

CASES PRESCREENED AT OTTAWA SHOWING COUNTRY OF ORIGIN  
FISCAL YEAR 1960-61

	Total Cases	Examined	Re-Examined	Passed	Certifications under Sec. 5				Total Certifications
					"A"	"B"	"I"	"C"	
Algeria.....	85	72	13	64		2		16	18
Argentina.....	621	523	98	483		9		112	121
Australia.....	1,369	1,298	71	1,219	3	3		127	133
Azores.....	3,756	3,236	520	3,455	3	32		211	246
Bermuda.....	47	43	4	33				9	9
Bolivia.....	1	1		1					
Brazil.....	353	309	44	284	2	9	1	45	57
British Guiana.....	217	193	24	186		3		19	22
British W. Indies.....	1,725	1,565	160	1,577	8	6		91	105
Bulgaria.....	6	4	2	3				4	4
Burma.....	20	18	2	17		1			1
Canada.....	5,168	4,782	386	4,411	13	22		895	930
Central Africa.....	147	139	8	133		1		7	8
Central America.....	14	14		10		2			2
Ceylon.....	56	48	8	49		2		3	5
Chile.....	35	27	8	27				5	5
China.....	68	56	12	61		1		9	10
Colombia.....	56	54	2	46				11	11
Cyprus.....	27	21	6	25		1		2	3
Czechoslovakia.....	86	70	16	67		1		17	18
Dutch Guiana.....	1	1		1					
Dutch W. Indies.....	36	34	2	34				2	2
Ecuador.....	21	15	6	15				5	5
Egypt.....	53	50	3	41				10	10
Fiji Islands.....	11	11		10				1	1
French Guiana.....	4	4		4					
Gibraltar.....	1	1		1					
Hawaii.....	3	3		3					
Hungary.....	717	399	318	464		30		253	283
Iceland.....	13	13		10				3	3
Indo China.....	42	35	7	31		7		5	12
Indonesia.....	53	48	5	42				13	13
Iran.....	13	13		14					
Israel.....	1,517	1,356	161	1,246	2	45		270	317
Japan.....	302	285	17	242		14		41	55
Jordan.....	2	2		1				1	1
Korea.....	10	8	2	9				1	1
Kuwait.....	1	1		1					
Lebanon.....	410	370	40	366		9		28	37
Maderia.....	173	123	50	160	1	3		5	9
Malaya.....	76	70	6	64	1	3		4	8
Malta.....	3	3		3					
Mauritius.....	3	3		4					
Mexico.....	99	92	7	89				12	12
Morocco.....	152	116	36	136		2		20	22
Nepal.....	1	1							
New Caledonia.....	4		4	3				1	1
New Zealand.....	297	288	9	267				29	29
Pakistan.....	146	129	17	106		10		15	25
Paraguay.....	217	178	39	172		8		24	32
Peru.....	34	31	3	29		2		2	4
Philippines.....	82	70	12	77		1		1	2
Poland.....	3,303	2,835	468	2,569	4	117		764	885
Roumania.....	382	246	136	275		7		114	121
Russia.....	190	85	105	94		2		121	123
Society Islands.....	1	1		1					
South Africa.....	837	788	49	749	2	5		90	97
Spain.....	882	792	90	752	1	18		62	81
Thailand.....	3	3		3					
Tunisia.....	11	10	1	5				5	5
Turkey.....	219	166	53	177		9		35	44
Uruguay.....	75	67	8	65		2		5	7
U.S.A.....	5,756	5,565	191	4,909	23	13		716	752
Venezuela.....	437	393	44	389		7		44	51
West Indies Group.....	105	102	3	94		1		8	9
Yugoslavia.....	1,287	1,190	97	1,147		27		87	114
Totals—1960-61.....	31,842	28,469	3,373	27,025	63	437	1	4,380	4,881
Fiscal Year 1959-60.....	32,576	29,392	3,184	27,290	49	458		5,134	5,641



TABLE 33  
CERTIFICATION UNDER SECTION 5 OF THE IMMIGRATION ACT

Certifications under:	Canada	British Isles		Continent of Europe		Orient	Canada	Total
	I.M.S. Offices	Examined by Can. M.O.'s	Examined by Roster Drs.	Examined by Can. M.O.'s.	Examined by Roster Drs.		Prescreened at Ottawa	
SS (a) Mental Diseases and Defects.....	48	73	7	173	3	4	63	371
SS (b) Chronic Infectious Diseases.....	181	152	9	2,030	36	659	437	3,504
SS (c) Physical Defects.....	4,184	3,811	371	7,744	355	446	4,380	21,291
SS (i) Chronic Alcoholism.....				1			1	2
Total.....	4,413	4,036	387	9,948	394	1,109	4,881	25,168



### **Sick Mariners Service**

The concept of a treatment service for sick mariners had its origin in the Province of New Brunswick, where, prior to Confederation, a duty of one penny per ton was levied on foreign shipping. The funds collected were used to defray the cost of providing treatment for sick and injured crew members left behind when their vessels sailed. At Confederation, the responsibility for providing this service was transferred to the federal government. Originally, only foreign trade vessels were covered, but the act now covers vessels in the interprovincial coastal trade and, on a voluntary basis, fishing vessels registered in Canada.

The service operates under the authority of Part V of the Canada Shipping Act, which provides for a compulsory levy of two cents per net registered ton (or a sum not less than \$2.00) on all vessels arriving from foreign ports, or from another province. The duty is collected a maximum of three times during a calendar year. If coverage is desired on behalf of fishing vessels the first payment must be made prior to the first fishing voyage in the calendar year. Free treatment at Canadian ports to the extent necessary is provided for up to one year for all crew members employed on board a vessel in respect of which sick mariner dues have been currently paid, and who apply for treatment in accordance with the provisions of the act.

While the Sick Mariners Service continues to provide medical and surgical treatment and drugs to all eligible sick mariners, hospitalization is only provided to those mariners not covered by a provincial hospital insurance plan. As a result, hospitalization costs to the service have been substantially reduced. Hospitalization provided foreign seamen now accounts for the major portion of this expense. The cost of providing hospital services dropped from \$524,354.49 in 1959-60 to \$387,528.17 in 1960-61, a decline of 26 per cent.

The number of fishing vessels paying dues on a voluntary basis rose 4.2 per cent to 6,810, compared to 6,535 the previous year. There was also an increase in the number of vessels paying dues on a compulsory basis, rising from 2,608 in 1959-60 to 3,066 in 1960-61. The total number of vessels paying dues rose 8 percent to 9,876 compared to 9,143 the previous year.

The revenue collected from all vessels rose 18.7 percent to \$478,962.15 from \$403,430.06 the previous year. Expenditure remained almost stationary at \$846,825.45 compared to \$846,355.19, the previous year. The actual cost of providing treatment fell 7.1 percent to \$730,170.54 from \$786,290.07 the previous year. The similarity between total cost for the two years is due mainly to higher salaries and increased fees. The cost of treatment, including drugs, by salaried full and part-time physicians averaged approximately \$4.70 per visit; by fee-for-service physicians, \$5.75 per visit.

The total number of hospitals treating sick mariners during the year was 143, and the number of port physicians, consultants and specialists providing treatment numbered 804. A total of 39,075 seamen received treatment compared to 43,940 the previous year; 1884 were admitted to hospital at departmental expense compared to 2,662 the previous year. The total number of crew members on vessels paying sick mariners dues was 141,473.



Sick mariners clinics, staffed by medical officers of the department were in operation at Halifax and Sydney, N.S.; Saint John, N.B.; Quebec and Montreal, P.Q., and Vancouver and Victoria, B.C. At Sydney, Indians of the Eskasoni Indian Agency continue to be treated by the staff of the Sick Mariners Service.

Port physicians on a part-time salary basis provide treatment at St. John's, Newfoundland; Digby, Liverpool, Lunenburg, North Sydney and Pictou, N.S.; Shippegan and Tracadie, N.B.; Gaspé and Port Alfred, P.Q.; and at Port Alberni, B.C. At numerous other ports, treatment was provided by designated port physicians on a fee-for-service basis.

On July 31st, 1960, Order-in-Council P.C. 1955-4/483, which provided free treatment to crew members of government vessels, in the same manner as for crews of ships which pay dues, was repealed and treatment arrangements became the responsibility of the employing department. As a result, the total expenditure for the year was reduced to \$45,870.85 from \$86,221.07, the previous year. There were 2,076 eligible crew members employed on 200 government vessels.

TABLE 34

REVENUE, EXPENDITURE AND DEFICIT CLASSIFIED  
ACCORDING TO TYPE OF VESSEL

Calendar Year 1960

Classification of Vessel	Revenue	Expenditure	Deficit	Deficit Expressed as Percentage of Revenue
	\$	\$	\$	
Foreign-going.....	460,065.27	509,052.64	48,987.37	10
Coasting.....	4,522.32	8,828.10	4,305.78	95
Fishing.....	14,374.56	314,399.80	300,025.24	2,087
Additional expenditure not classified as to type of vessel:—		14,544.91	14,544.91	
Total.....	478,962.15	846,825.45	367,863.30	76
Government (not paying S.M. Dues) Treatment provided under Authority of P.C. 1955-4/483 T.B. 484135 up to July 31, 1960		\$ 45,870.85		



TABLE 35

## STATEMENT OF DISEASES AND INJURIES TREATED

During the Fiscal Year 1960-61

	Cases Treated
Tuberculosis of respiratory system .....	25
Tuberculosis other forms .....	8
Syphilis and its sequelae .....	69
Gonococcal infection .....	975
Dysentery all forms .....	12
Other infective diseases commonly arising in intestinal tract .....	4
Certain diseases common among children:	
Chicken pox .....	7
Measles .....	12
Mumps .....	6
Whooping cough .....	1
Malaria .....	4
Diseases due to helminths .....	49
All other diseases classified as infective and parasitic .....	694
Benign neoplasms .....	298
Malignant neoplasms and others .....	87
Allergic disorders .....	922
Thyroid gland .....	29
Diabetes mellitus .....	125
Avitaminosis .....	144
Anaemias .....	698
Psychoneuroses and psychoses .....	685
Vascular lesions .....	64
Diseases of eyes .....	434
Diseases of ear and mastoid process .....	1,276
Rheumatic fever .....	34
Chronic rheumatic heart disease .....	14
Arteriosclerotic and degenerative heart .....	770
Hypertensive disease .....	640
Diseases of veins .....	2,855
Acute naso-pharyngitis, tonsillitis, hypertrophy of tonsils and adenoids .....	3,274
Influenza .....	1,220
Pneumonia .....	448
Bronchitis .....	1,845
All other respiratory diseases .....	1,268
Diseases of stomach and duodenum .....	1,827
Appendicitis .....	247
Hernia of abdominal cavity .....	370
Diarrhoea and enteritis .....	429
Diseases of gall bladder and bile ducts .....	302
Other diseases of digestive system .....	6,924
Nephritis and nephrosis .....	137
Diseases of genital organs (male) .....	2,282
Boils, abscesses, cellulitis and other skin infections .....	3,145
Other diseases of the skin .....	585
Arthritis and rheumatism .....	1,495
Diseases of bones and other organs of movement .....	652
Congenital malformations .....	36
Other specified and ill-defined diseases .....	3,052
Occupational accidents and occupational poisonings .....	1,090
Accidents and poisonings, not specified as occupational .....	3,769
	<hr/>
	45,338



## DIVISION OF NARCOTIC CONTROL

The Division is responsible for ensuring that narcotics are available in quantities sufficient for the medical needs of the country; maintaining the required control over distribution of narcotics so as not to interfere with the proper medical distribution of these supplies; prevention of addiction by control and educational methods.



Narcotic auditors attached to the staff of the Narcotic Control Division perform audits, inspections and investigations of licensed dealers, retail pharmacists and hospitals across Canada. This work has proved valuable in maintaining the required control over narcotics in this country.

### **Licensed Dealers**

A total of 162 pharmaceutical firms were licensed during the calendar year to deal in narcotics. Of these, 61 acted solely as distributors and the remainder were authorized to manufacture pharmaceutical products containing narcotics.

In accordance with commitments at the international level, the activities of all these firms, both from the standpoint of pharmaceutical standards as well as the care and security of narcotic items were closely scrutinized by pharmacist-inspectors and administrative staff of the division.



Our narcotic requirements were met, during the year, by the issuance of 134 licences to import from various countries of supply. Moreover, 75 licences were issued covering the export of narcotic preparations to countries which have signified a medical need for them.

### **Supervision Maintained Over Retail Pharmacies**

Our policy of obtaining narcotic sales reports from all operating pharmacies in Canada continued during the year with nearly 14,000 reports being received.

New synthetic narcotics continue to be of considerable interest and a close check is being maintained regarding their use, in order to prevent addiction developing, particularly where such drugs are being routinely furnished to patients.

There has been an increase in correspondence with physicians on matters of a narcotic nature, with regard to personal addiction and persons known as addicts making attempts to obtain supplies from doctors. The number of professional persons discovered as being newly addicted during the year just equalled the number deleted from our records due to our having no adverse record over the past five years, this being the first year since 1954 that there has not been a decrease in our "professional" addicts figure.

### **Consumption Statistics**

Developments in the field of synthetic narcotics continued during the year with the result that new types of narcotics in this category were required by the medical and allied professions. Details of imports and consumption figures are set forth on subsequent charts.

### **Addiction**

Slight increases were noted in the number of active criminal addicts in the provinces of British Columbia and Ontario with decreases in Alberta, Saskatchewan, Manitoba and Quebec for a net decrease of 75. Our known criminal addicts now total 2,929. There has been a slight drop in the number of criminal addicts under 20 years of age; 49 in 1960 compared with 55 in 1959. The trend toward stabilization in our over-all addiction figures continues as indicated by our total addict figures for the past seven years;

1954 .....	3212	1958 .....	3412
1955 .....	3425	1959 .....	3408
1956 .....	3241	1960 .....	3295
1957 .....	3315		

Medical addicts have decreased from 515 in 1954 to 237 in 1960, due probably in considerable measure to the department's policy of providing physicians with information concerning the addictive properties of the synthetic drugs now available in Canada.



**Convictions**

Due to smuggling activities, our addict population continued to obtain their heroin supplies. There were no major thefts of narcotic items from legal sources.

There were 509 convictions under the Opium and Narcotic Drug Act involving 473 individuals. Of these, 313 were male and 160 female. Four males and 10 females were under 20 years of age, the preponderant age group being between 20 and 35. Only one conviction under the act was registered involving a professional person.

**Co-operation by Enforcement Agencies**

Our liaison with the RCMP and other law enforcement agencies continues at a most satisfactory level. It is felt that the drop in the overall number of convictions this year is largely due to increased surveillance on their part. This activity undoubtedly also is represented in the fact that, while the population of the country is consistently growing, our number of known addicts remain about the same.

**Liaison with Medical, Pharmaceutical and Relating Professions**

The division continued to maintain close contact with the provincial registrars of the medical, pharmaceutical and related professions.

Lectures were given to graduating classes in medical schools, pharmaceutical, and nursing faculties at universities in Canada. This field of work is increasingly important due to the appearance of many new drugs on the market with marked potential addiction properties. Personal interviews conducted with addicted professional personnel also have proven extremely beneficial.

**International Co-operation**

All required reports were submitted to interested sections of the United Nations and liaison with narcotic authorities in other countries remained at a high standard.

Additionally, a very considerable effort was made by Canadian narcotic authorities to assist in a consolidation of several previous international agreements into a single convention. A conference for this purpose was held at the United Nations in New York and it is hoped the work will result in the adoption of this essential and effective piece of international legislation.







TABLE 37  
CONVICTIONS UNDER THE OPIUM AND NARCOTIC DRUG ACT DURING THE CALENDAR YEAR 1960

Province	NATURE OF OFFENCE				DRUGS INVOLVED								
	Illegal Possession	Trafficking	Possession for the Purpose of Trafficking	Total	Heroin	Marihuana	Morphine	Methadone	Pethidine	Codeine	Dilaudide	Poppy Heads	Total
Newfoundland													
Prince Edward Island													
Nova Scotia	1			1			1						1
New Brunswick	1			1		1							1
Quebec	7	2	1	10	9		1						10
Ontario	148	14	15	177	159	14	3				1		177
Manitoba	1		1	2	2								2
Saskatchewan	6			6	3		3						6
Alberta	19	2	3	24	17				2			5	24
British Columbia	268*	5	15	288	282		2	2		2			288
Total	451	23	35	509	472	15	10	2	2	2	1	5	509

(Of the above there were 16 males and 5 females in B.C., 4 males in Alberta, 3 males and 3 females in Ontario who had two convictions as well as 2 males in B.C. who had three convictions. There was also 1 male who had one conviction in B.C. and one in Alberta.)

\*One female was convicted under the O.N.D. Act and the Juvenile Delinquent Act.



TABLE 38  
SHOWING IMPORTS OF MAIN NARCOTICS FOR PERIOD 1951-1960 INCLUSIVE

Unit of Weight—Kilogramme (Pure)

Year	Raw Opium	Medic- inal Opium and Preps.	Papa- verine	Mor- phine	Hydro- codone	Hydro- mor- phone	Ethyl- mor- phine	Codeine	Prol- codine	Cocaine	Alpha- prodine	Levor- phanol	Metha- done	Pethi- dine
1951	54.658	125.392	47.401	87.104	8.675	0.482	31.128	1,056.718		29.852			2.069	260.508
1952	1.502	147.420	43.035	33.254	6.407	0.425	39.775	1,647.078		31.808			9.327	349.924
1953	49.442	106.823	43.659	78.246	5.018	0.368	31.411	1,153.335	0.595	49.612	2.636	0.793	5.897*	323.449*
1954	5.897	149.688	84.936	60.499	17.775	0.198	39.378	2,814.390	17.775	48.308	1.587	0.567	9.185	592.061
1955	31.525	149.688	86.836	52.192	5.301	0.425	24.182	2,396.624	5.698	29.597	6.548	0.567	9.554	430.665
1956	17.236	145.350	87.448	47.332	13.012	0.471	55.291	1,893.242	2.602	32.865	2.464	0.338	3.911	323.104
1957	2.000	90.902	93.770	30.857	20.013	0.355	19.941	2,039.416	3.872	31.536	5.548	0.353	6.489	534.702
1958	0.567	108.864	83.109	28.342	33.338	0.174	19.978	2,445.569		33.474	4.488	0.414	6.788	407.728
1959		111.630	94.223	35.094	15.282	0.267	21.036	2,813.256	3.580	19.482	5.984	0.370	4.063	546.189**
1960	0.284	117.596	79.063	44.889	18.588	0.053	14.032	3,039.153		31.257	3.344	0.302	3.236	636.846

\*Pure Drug Figure Utilized Since 1953.

\*\*53.940 Kg. returned to Great Britain, discoloured material.



# WELFARE BRANCH

## INTRODUCTION

Considerable progress was made by the Welfare Branch on a number of projects during the year.

Following the speech from the Throne of November 1960, which forecast federal encouragement of amateur athletics, an extensive program of preparatory work was undertaken for the proposed Fitness and Amateur Sport Bill.

The Old Age Security Act was amended in July 1960 to allow a pensioner who has lived in Canada for 25 years after the age of 21 to receive his pension indefinitely outside Canada. The amendment also allows pensions to be paid to other persons outside Canada for six months, not including the months of departure. The implementation of arrangements for the payment of cheques outside Canada was effected smoothly.

The operation of the Old Age Assistance, Blindness Allowance, Disability Allowances and Unemployment Assistance Acts was kept under continuous review with a view to increasing the effectiveness of these programs. Negotiations with several provinces for the payment of supplementary relief payments to needy recipients of old age security, old age assistance, disabled and blind persons' allowances were concluded satisfactorily.

Assistance continued to be given to provincial emergency welfare services in the development of a national survival program. Co-operation and assistance were obtained from other federal agencies. The Post Office Department, for example, assumed responsibility for the production and stockpiling of Safety Notification Postcards and joint plans were worked with the Department of National Defence for care of survivors in damaged and fallout areas in the event of attack.

Civil Service Defence intensified its efforts to have the people in federally occupied buildings organized for evacuation if an emergency were to occur. To this end first aid and home nursing classes were given in all provinces, and fire evacuation drills were held in co-operation with the Dominion Fire Commissioner.

The Canadian Civil Defence College continued to train key civil defence emergency measures personnel and members of the Armed Forces through the provision of various courses and conferences.

International Welfare activities of the Department were substantially expanded through Canada's election to the Social Commission of the UN, and to the Executive Board of the United Nations Children's Fund, as well as by increased participation in technical assistance work.



## CANADIAN CIVIL DEFENCE COLLEGE

During the 1960-61 fiscal year, 3,932 persons used the facilities of the Civil Defence College for 63 courses, 10 conferences, 19 group visits and two Civil Service Commission courses. This represents an increase of 804 over the 1959-60 fiscal year.

Courses included: staff training, emergency health, emergency welfare, emergency measures, communications, rescue, radiological defence and techniques of instruction.

Attendance from the provinces, the armed forces and the federal government was:

British Columbia .....	195
Alberta .....	122
Saskatchewan .....	91
Manitoba .....	165
Ontario .....	488
Quebec .....	188
New Brunswick .....	82
Nova Scotia .....	182
Prince Edward Island .....	65
Newfoundland .....	72
Armed Forces .....	931
Federal Employees .....	239
Others .....	44
<b>Total</b> .....	<b>2,864</b>
Group Visits .....	948
CSC (Facilities Only) .....	120
	<b>3,932</b>

A total of 151,500 Emergency Welfare Services Precis and 515,000 Civil Defence College Precis were distributed to the provinces.

## EMERGENCY WELFARE SERVICES DIVISION

The Emergency Welfare Services Division has continued to carry out its responsibility, for assisting the provinces, municipalities and others in the planning, organizing and operating of Emergency Welfare Services (Emergency Clothing, Emergency Lodging, Emergency Feeding, Registration and Inquiry, and Personal Services, as set forth in Section 4, Civil Defence, Order-in-Council 1959-656.



### ***Development of Plans, Policies and Procedures***

Basic plans were formulated and policies were made regarding the organization and operation of Welfare Centres in reception communities—relating to the staff establishment, staff duties, space, equipment and supplies, and procedures for setting up and operating each of the five Emergency Welfare Services within the centres.

The division participated in the national "TOCSIN" Exercise at federal headquarters, and one staff officer went to Ontario to assist at their provincial emergency headquarters.

Joint planning between the Post Office Department and this division resulted in that department assuming responsibility for the production and distribution of Safety Notification Cards and Emergency Change of Address Cards. The use of these cards in an emergency would be of assistance to the Registration and Inquiry Service.

Liaison also was carried on with the Emergency Supplies Planning Branch regarding plans for the control and distribution of essential supplies, such as food and clothing; with the Army to co-ordinate plans regarding the care of survivors brought out of damaged and fallout areas; with the RCMP regarding plans for the identification of the living unable to identify themselves and the dead; with Emergency Health Services Division regarding the responsibilities of both services in relation to the feeding of casualties and staff at Advanced Treatment Centres and Improvised Hospitals; and with the Departments of Finance and Labour.

A meeting was held with the National Directors of Welfare Services of the Salvation Army and the Canadian Red Cross to consider the role of these agencies in a national emergency.

There has been a reciprocal representation of American and Canadian Welfare Staff Officers at federal welfare courses and conferences held in both countries. It is important that emergency welfare policies and procedures be as similar as possible in these countries as there would be border crossings in each direction if this continent were attacked.

### ***Guidance and Assistance to the Provinces and Municipalities***

Federal staff officers visited the provinces for consultation regarding the development of their Emergency Welfare Services organization and training program.

The issuing of 19 bulletins was one of the media used to keep the provinces informed of new or revised policies and operational procedures, new training and operational forms and material, and of other activities of the Emergency Welfare Services Division.

A total of 156 welfare candidates attended 7 Emergency Welfare Services Courses at the Canadian Civil Defence College for training to enable them to fill key emergency welfare positions across Canada.

A federal staff officer assisted British Columbia in preparing and conducting a "Welfare Centre Managers" Course, and provided similar assistance to Ontario with respect to a "Personal Services" Institute, and a "Registration and Inquiry" Institute.



In November, a 4 day Federal-Provincial Welfare Directors Conference was held, which was attended by a senior official of the Department of Public Welfare from each province, the Director of Emergency Welfare Services for each province, the Executive Director of the Canadian Association of Social Work and the Executive Secretary of the Public Welfare Division, Canadian Welfare Council. Many constructive decisions and recommendations were made at this conference which, upon being implemented, will do much towards the development of a sounder provincial-municipal Emergency Welfare Services' organization.

Suggested timetables for courses to be held at the local and provincial levels were prepared for the guidance of provincial Emergency Welfare Services Directors. Staff members participated in the programs of three professional annual conferences. Numerous lectures were given by staff members to other Federal Civil Defence courses, conferences, and Emergency Measures Organization courses.

New precis were written upon each of the five Emergency Welfare Services and many were revised in line with changes made in survival policy.

The Mobile Feeding Unit which had been produced by this division, was tested in several provinces and at Emergency Feeding Courses at the Canadian Civil Defence College.

A pamphlet explaining the Mobile Feeding Unit was produced and distributed to the provinces.

Several operational forms were designed and produced for use by Emergency Lodging and Personal Services. Small quantities have been distributed to the provinces for training purposes.

A "Personal Services" Display and a "Family Preparedness For Survival" display were produced. The information on the division's other five displays was revised in line with changed policies and terminology. These displays were shown upon 35 occasions at large public exhibitions, professional conferences, other conferences and training courses.

Articles were written for professional journals, "Civil Defence—Canada", and "Emergency Measures Organization National Digest".

A "Welfare Tips for Survival" pamphlet was prepared as a ready reference for the public regarding the self-help preparations which every Canadian should be making now.

A "Personal Services" leaflet was prepared for distribution when the Personal Services Display is used.

"Your Emergency Pack" pamphlet was revised following consultations with the provinces and technical committees.

The subject of one of the "Here's Health" radio programs was "Your Emergency Pack".

Consultations with the University Schools of Home Economics resulted in a minimum of 3 hours of instruction upon emergency feeding being incorporated into their curriculum.

### **Organization in the Provinces**

Much progress was made during the year in organizing Emergency Welfare Services within the Departments of Public Welfare of provincial governments in



accordance with federal-provincial agreements. In nine provinces, Welfare Departments are now involved in the program, taking varying degrees of responsibility. Five provincial departments have Emergency Welfare Planning Officers paid under the provisions of the Financial Assistance Program. Departments of Welfare of all provinces were represented for the first time at the Federal-Provincial Emergency Welfare Director's Conference.

### **Continuity of Government**

Plans for the relocation in an emergency of those staff components considered essential for the continuity of the branch were furthered.

Regional Directors of Family Allowances and Old Age Security and District Treasury Officers attended an Orientation and Planning Conference at the Canadian Civil Defence College under the auspices of this division.

### **Civil Service Civil Defence**

Civil Service Civil Defence intensified its efforts to have federally occupied buildings organized for the evacuation of the occupants should an emergency occur during working hours. Departments and agencies of government appointed chief and deputy chief building wardens. To date 269 federally occupied buildings in the Ottawa area have a warden service which is capable of evacuating the buildings in the event of an emergency. In many buildings, emergency teams—with fire, first aid, rescue, police and communication elements—were organized.

A first aid and home nursing training program has been developed for federal civil servants in all provinces. Over 8,000 civil servants have enrolled for these courses across Canada.

Eighteen fire evacuation drills were held in co-operation with the Dominion Fire Commissioner.

### **Administration**

Following the re-allocation of Civil Defence functions under the Civil Defence Order-in-Council, 1959, the Emergency Welfare Services Division was responsible for the transfer of federal title to provincial authorities of certain Civil Defence training equipment in use in the provinces. This was accomplished by Order-in-Council.

The title to the operational mobile broadcasting units which were procured under the previous Civil Defence organization, was transferred to the Canadian Broadcasting Corporation, which now is responsible for emergency broadcasting.

In November, 1960, the rented accommodation at the Beechwood warehouse was destroyed by fire; while some emergency welfare CD equipment and radiation detection instruments were destroyed a considerable amount of the equipment was salvaged.



## FAMILY ALLOWANCES AND OLD AGE SECURITY DIVISION

Numbers of beneficiaries under both the Family Allowances and the Old Age Security programs increased during the last fiscal year.

An important amendment to the Old Age Security Act, effective July 1, 1960, provides that a pensioner, resident in Canada for 25 years after the age of 21, who leaves the country, may have payment of Old Age Security outside Canada continued indefinitely.

In the case of a pensioner not resident in Canada for the required 25 years, payment may be continued for six months, exclusive of the month of departure and pension payments may be resumed on return to Canada.

As of March 31, 1961, pension payments were being forwarded to 8,242 recipients outside Canada.

There were 2,615,689\* active Family Allowance accounts and 909,245\* active Old Age Security accounts at the end of the fiscal year. Increases were, respectively, 52,508 and 22,797.

### ACCOMMODATION

The Ontario Regional Office in Toronto was moved to new quarters in February, 1961. The staff, after many years in cramped, unsuitable accommodation, now has satisfactory quarters.

With the acquisition, during the year, in the case of some offices, of additional space, the accommodation of most offices of the division is considered adequate. Only one move is anticipated in the near future, that of the Manitoba Regional Office in Winnipeg.

### COSTS OF ADMINISTRATION

The following is a comparison of administration costs of the two programs for this year and last year:

	<i>Dept. of National Health and Welfare</i>	<i>Dept. of Finance (Treasury)</i>	<i>Dept. of Public Works</i>	<i>Total</i>
1959-60 .....	\$2,924,195	\$4,218,531	\$204,431	\$7,347,159
1960-61 .....	3,203,943	4,368,317	195,319	7,767,580

It should be noted that 46 per cent of the Treasury costs were for postage.

### WELFARE SERVICES

The difficulty of recruiting suitable professional staff for the Welfare Sections of Regional Offices remains a problem, as it does in most social agencies in Canada.

\*It will be noted that in both programs, the number of active accounts is greater than the number of accounts in pay, as shown later in this report and in the attached tables, the difference results from the fact that at all times there are some accounts where payment has been suspended for some reason.



In addition to maintaining liaison with social agencies, government departments and institutions providing services for children and older people, the staffs of the Welfare Sections examined reports of misuse of Family Allowances with the result that 185 persons were appointed to administer the expenditure of allowances on behalf of children. This is a particularly small number in relation to the total number of Family Allowances recipients in Canada. Social workers keep these cases under review in order that payments to parents can be resumed as soon as this is feasible.

The staffs also have responsibility of examining the need for trusteeship where a pensioner is reported incapable of managing his own affairs. Apart from public trustee, 2,498 trustees were appointed through action by the Welfare Sections in the past year.

#### FAMILY ALLOWANCES PAYMENTS

The number of active accounts, as mentioned earlier, was higher in 1960-61 than in 1959-60 but the rate of growth in the program declined. For example, in the fiscal years 1958-59, 1959-60 and 1960-61 the increases were 85,279, 58,992 and 52,508, respectively.

Total net payments of Family Allowances for 1960-61 were \$506,191,647, an increase of \$14,997,289 over those for the previous year. Tables at the end of this section give the overall picture of payments.

#### OVERPAYMENTS

Outstanding overpayments represent the balance arrived at by deleting amounts recovered and lesser amounts authorized by the Treasury Board as uncollectable, from all overpayments since inauguration of the program in 1945. At March, 1961, overpayments totalled \$223,073.

#### ALLOWANCES LOST, REINSTATED

There was an increase in the last year in the number of children for whom allowances were lost because of non-attendance at school. In 1959-60 the number was 6,994 and in 1960-61 it was 7,496. In the past fiscal year allowances were reinstated for 5,431 children who had returned to school.

There was a decrease in the number of children losing allowances because of employment, from 16,026 in 1959-60 to 11,567 in the past fiscal year. Allowances were reinstated during the year for 1,103 children no longer employed.

#### OLD AGE SECURITY PAYMENTS

The number of recipients of Old Age Security in March, 1961 was 904,906 as compared with 876,410 in March, 1960, an increase of 28,496. Total net payments in 1960-61 were \$592,413,283. A table of Old Age Security payments follows this section.

#### OVERPAYMENTS

Overpayments outstanding at any time is the total amount overpaid since the Old Age Security program began in January, 1952, less the amounts improperly paid but subsequently collected. At the end of 1960-61, the total amount outstanding as overpaid was \$45,815. This was a slight increase over the March, 1960 figure of \$39,069.



## PROOF OF AGE

Records for the last few months of the year indicate that 75 per cent of applications for Old Age Security were approved on the basis of first-class evidence of age (acceptable birth or baptismal certificates) and 25 per cent on the basis of secondary types of evidence. In the year, 550 cases were referred to Old Age Security tribunals for decision.

## SPECIAL PROJECTS

Before the end of the year under review, two new types of special surveys were begun which had never previously been undertaken. One of these relates to pensioners in Canada who are 90 or over, the other to persons receiving pension outside Canada. It was decided that special contact should be made with these persons in order to ensure that there is continuing eligibility for payment.

In all cases where the pensioner is out of Canada, and in some of those where the pensioners are over 90 but in Canada, certificates were forwarded for completion by the pensioners. In other cases, calls were made on pensioners by Regional Office staff members. These surveys are not complete.



TABLE 39  
COMPARATIVE STATEMENT OF FAMILY ALLOWANCES PAYMENTS  
BETWEEN MONTH OF MARCH 1960 AND MONTH OF MARCH 1961

Province	Month of March 1960					Month of March 1961				
	Families Receiving		Children Receiving		Amount Paid	Families Receiving		Children Receiving		Amount Paid
	Number	Average Allow. per Family	Number	Average Allow. per Child		Number	Average Allow. per Family	Number	Average Allow. per Child	
Newfoundland.....	63,245	\$20.72	196,447	6.67	\$ 1,310,421	64,464	\$20.91	201,512	\$6.69	\$ 1,347,893
Prince Edward Island.....	13,648	18.83	38,174	6.73	257,002	13,877	18.92	38,938	6.74	262,558
Nova Scotia.....	103,872	16.89	261,720	6.70	1,754,617	104,972	17.01	266,629	6.70	1,785,598
New Brunswick.....	81,541	19.15	232,891	6.70	1,561,318	82,440	19.25	236,379	6.71	1,587,095
Quebec.....	704,831	18.00	1,894,276	6.70	12,685,381	722,592	17.99	1,937,918	6.71	12,999,359
Ontario.....	894,046	14.87	1,997,413	6.65	13,293,906	913,025	15.08	2,065,618	6.67	13,771,182
Manitoba.....	128,923	15.51	300,305	6.66	1,999,285	130,743	15.71	308,447	6.66	2,053,557
Saskatchewan.....	131,320	16.23	319,788	6.66	2,131,083	131,830	16.46	325,020	6.68	2,170,547
Alberta.....	193,721	15.69	457,672	6.64	3,040,444	199,278	15.89	477,417	6.63	3,166,318
British Columbia.....	230,549	14.72	506,895	6.69	3,392,836	233,801	14.99	523,637	6.69	3,504,525
Northwest Territories and Yukon.....	5,568	16.44	14,408	6.35	91,556	5,908	16.82	15,619	6.36	99,369
NATIONAL.....	2,551,264	\$16.27	6,219,989	\$6.67	\$41,517,849	2,602,930	\$16.42	6,397,134	\$6.68	\$42,748,001



TABLE 40

## NET FAMILY ALLOWANCES PAYMENTS—COMPARISON BY FISCAL YEARS

Province	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55
Newfoundland.....	9,747,030.00	10,224,103.00	10,613,908.00	11,038,874.49	11,497,719.33	11,967,775.00
Prince Edward Island.....	2,411,291.00	2,467,257.00	2,495,987.00	2,522,830.00	2,558,097.00	2,590,704.00
Nova Scotia.....	15,291,614.07	15,660,003.27	15,949,540.73	16,297,169.95	16,716,374.00	17,147,920.00
New Brunswick.....	13,375,434.33	13,708,198.00	13,892,907.00	14,287,535.05	14,700,819.00	15,073,324.00
Quebec.....	95,901,763.15	99,558,247.04	102,883,811.56	107,084,124.36	111,441,301.49	116,057,182.00
Ontario.....	84,940,808.63	89,034,870.53	93,207,144.30	98,303,868.20	104,409,819.41	110,492,480.00
Manitoba.....	15,668,695.50	16,235,519.56	16,703,466.69	17,283,659.61	17,979,853.88	18,705,349.00
Saskatchewan.....	18,953,599.79	19,237,070.80	19,424,561.76	19,723,352.42	20,244,540.00	20,894,790.00
Alberta.....	19,822,386.97	20,762,273.29	21,573,429.99	22,575,583.60	23,958,080.50	25,390,585.00
British Columbia.....	20,813,661.00	21,952,569.36	23,063,642.85	24,399,858.81	25,904,496.28	27,405,872.00
Yukon and Northwest Territories.....	587,749.50	625,348.67	649,273.15	680,828.30	702,801.30	739,983.00
NATIONAL.....	\$297,514,033.94	\$309,465,460.52	\$320,457,673.03	\$334,197,684.79	\$350,113,902.19	\$366,465,964.00
Province	1955-56	1956-57	1957-58	1958-59	1959-60	1960-61
Newfoundland.....	12,414,789.00	12,881,415.00	14,131,153.26	15,162,900.03	15,566,372.10	15,960,416.14
Prince Edward Island.....	2,621,722.00	2,640,585.00	2,824,310.34	2,994,334.00	3,062,692.50	3,124,017.00
Nova Scotia.....	17,596,684.40	17,973,392.00	19,400,493.32	20,560,461.88	20,932,794.00	21,241,829.50
New Brunswick.....	15,451,544.00	15,779,360.00	17,074,970.00	18,201,518.00	18,588,795.25	18,877,744.51
Quebec.....	120,389,837.92	124,368,344.00	136,080,634.08	146,278,434.72	150,462,530.66	154,185,287.76
Ontario.....	116,604,314.27	122,539,123.00	136,706,313.83	150,186,253.35	156,681,499.79	162,610,723.51
Manitoba.....	19,418,713.24	19,888,717.00	21,520,778.50	23,091,594.01	23,730,765.46	24,384,595.17
Saskatchewan.....	21,401,114.00	21,644,971.00	23,241,829.00	24,789,277.50	25,363,935.50	25,848,509.16
Alberta.....	26,752,793.00	27,953,311.00	31,029,720.19	34,122,637.00	35,765,853.54	37,365,329.06
British Columbia.....	29,097,077.14	31,029,472.00	34,969,036.05	38,409,308.36	39,984,175.79	41,433,470.17
Yukon and Northwest Territories.....	786,437.15	819,150.00	907,321.25	990,349.00	1,074,944.05	1,159,725.00
NATIONAL.....	\$382,535,026.12	\$397,517,840.00	\$437,886,559.82	\$474,787,067.85	\$491,214,358.64	\$506,191,646.98



TABLE 41  
OVERPAYMENTS OF FAMILY ALLOWANCES MARCH, 1961

Province	Overpayments Recoverable by Deduction		Overpayments Recoverable by Collection		Overpayments Considered Uncollectable		Total Overpayments Outstanding	
	Number of Accounts	Amount \$ cts.	Number of Accounts	Amount \$ cts.	Number of Accounts	Amount \$ cts.	Number of Accounts	Amount \$ cts.
Newfoundland.....	21	540.00	30	1,249.00	59	1,316.50	110	3,105.50
Prince Edward Island.....	16	204.00	3	114.00	10	251.50	29	569.50
Nova Scotia.....	35	811.00	66	1,147.50	170	3,870.25	271	5,828.75
New Brunswick.....	27	458.00	58	1,184.51	145	4,998.00	230	6,640.51
Quebec.....	304	17,833.00	451	29,173.52	1,193	64,939.58	1,948	111,946.10
Ontario.....	132	8,060.42	419	13,184.75	1,223	25,360.53	1,774	46,605.70
Manitoba.....	27	1,632.00	39	576.00	105	3,055.00	171	5,263.00
Saskatchewan.....	37	1,547.00	61	2,589.00	102	7,009.00	200	11,145.00
Alberta.....	49	3,803.00	151	5,675.00	154	5,589.69	354	15,067.69
British Columbia.....	70	3,699.00	88	2,289.23	195	7,290.32	353	13,278.55
Yukon and Northwest Territories.....	11	563.00	89	2,533.00	12	527.00	112	3,623.00
NATIONAL.....	729	39,150.42	1,455	59,715.51	3,368	124,207.37	5,552	223,073.30*

\* In addition to this amount outstanding, there has been deleted as uncollectable by Treasury Board authority between July, 1945 and March 31, 1961, a gross amount of \$143,925.21.



TABLE 42  
STATISTICS ON OLD AGE SECURITY

Province	No. of Pensioners in Pay March, 1960	Net Payment for March, 1960 only	No. of Pensioners in Pay March, 1961	Net Payment for March, 1961 only	Total Net Payment for Fiscal Year Ended March 31, 1960	Total Net Payment for Fiscal Year Ended March 31, 1961
Newfoundland.....	17,008	\$ 934,952	17,379	\$ 958,070	\$ 11,131,339	\$ 11,354,705
Prince Edward Island.....	7,278	401,459	7,492	412,452	4,823,008	4,944,372
Nova Scotia.....	40,679	2,262,228	41,919	2,325,482	27,012,650	27,610,488
New Brunswick.....	29,965	1,665,227	30,732	1,701,675	19,906,303	20,350,402
Quebec.....	184,500	10,214,778	191,136	10,522,710	120,318,812	124,321,715
Ontario.....	317,727	17,496,498	217,304	18,031,912	208,616,082	214,625,682
Manitoba.....	53,284	2,952,547	55,278	3,049,793	35,046,515	36,088,676
Saskatchewan.....	55,233	3,063,731	57,175	3,166,445	36,311,467	37,572,791
Alberta.....	58,386	3,257,719	60,708	3,378,935	38,153,437	39,688,023
British Columbia.....	111,742	6,198,708	115,157	6,369,467	73,155,743	75,451,417
Yukon and Northwest Territories.....	608	35,429	626	35,435	411,690	405,012
NATIONAL.....	876,410	\$48,483,276	904,906	\$49,982,376	\$574,887,046	\$592,413,283



## FITNESS AND AMATEUR SPORT

Growing recognition of the need for federal aid to fitness, recreation and amateur sports work in Canada was reflected in the greatly increased emphasis placed on it by the department during the year. The Consultant on Fitness and Amateur Sport aided by staff from other divisions, was actively concerned with



One of Canada's fittest young men, Bruce Kidd (above), is an honor student in high school as well as a champion long distance runner. Leaders in the field of fitness and amateur sport today emphasize that the fit person is a well-rounded personality, intellectually, emotionally and physically.



preparatory work for the new fitness and amateur sport program announced by the Prime Minister and forecast earlier in the Speech from the Throne.

Closer liaison was built up with the Canadian Sports Advisory Council and with provincial departments. Departmental representatives attended two national conferences on Physical Fitness, one sponsored by the Canadian Sports Advisory Council and the other convened jointly by the Canadian Medical Association and the Canadian Association for Health, Physical Education and Recreation. In addition, the consultant attended meetings of the Amateur Athletic Union of Canada, the Ontario Physical Fitness Study Committee's Workshop, the American College of Sports Medicine, the American Academy of Physical Education and the American Association for Health, Physical Education and Recreation.

Co-operation was extended to the Penitentiaries Branch and the Canadian Association of Health, Physical Education and Recreation in the development of equipment for physical activities. Services continued to be provided to federal and provincial government departments, national associations and universities, as well as reference assistance to investigators conducting research, to professional study groups, to press, radio and television and to Canadians carrying on advanced studies in other countries.

## INTERNATIONAL WELFARE DIVISION

During the year the department's increased responsibility for international welfare activities was reflected in the appointment of a Director of International Welfare Services.

Canada was elected in 1960 to the Social Commission of the United Nations, for a four-year term commencing in 1961. The Deputy Minister of Welfare acted as Canadian delegate to the Thirteenth Session of the Commission and was elected rapporteur of the meeting. The deliberations of the commission centered on the problem of balancing social with economic improvement, particularly in the underdeveloped countries.

In April 1961, Canada was re-elected to the Executive Board of the United Nations Children's Fund (UNICEF). A member of the International Welfare Staff attended the 1961 meeting as an observer. A review of policy and programs affecting UNICEF was commenced in anticipation of the responsibilities to be assumed by the department in this area.

The Deputy Minister of Welfare attended the 10th International Conference of Social Work in Rome, from January 8-14, 1961, and acted as chairman of one of the commissions of the conference which considered the question of interrelationship of government and voluntary agencies in the provision of welfare services.

Studies were also made and material prepared on welfare and social security questions for the International Labour Organization. The Director of International Welfare Services served as a government adviser at the 45th Session of the ILO where the question of treatment of nationals and non-nationals under social security programs was studied.

During the year the department's responsibility for advising on technical co-operation matters in the field of external aid was substantially increased because



of larger numbers of trainees being brought to Canada; a comprehensive review of Canadian welfare resources in the field of technical co-operation was carried out for use in Canada's external aid programs.

### OLD AGE ASSISTANCE

The number of recipients of old age assistance exceeded 100,000 in November, 1960 for the first time since the act came into operation in 1952.

Prior to the introduction of federal old age security without a means test for all persons over 70, old age pensions, subject to a means test and payable at 70, were being paid to more than 300,000 persons, about 47 per cent of the population over 70 at that time.

The number of recipients of old age assistance remains at about 21 per cent of the population 65 to 69 years of age. The Old Age Assistance Act provides financial aid subject to a means test for persons aged 65 to 69. Through federal-provincial agreements the provinces are entitled to receive the federal contribution of 50 per cent of their expenditures for assistance up to a maximum of \$55 a month per person.

Old age assistance provides financial aid to older persons who are not able to continue in employment or to find employment. Recipients are transferred at age 70 to old age security at about the rate of 22,000 a year.

Roughly 75 to 80 per cent of recipients receive \$55 monthly, the maximum amount payable. In all provinces the maximum amounts of income allowed are the amounts specified in the federal act. These, including the allowance itself, are \$960 a year for an unmarried person; \$1,620 for a married person; \$1,980 if the spouse is blind.

Payments are administered by the provinces. The provincial authorities generally consider more than 30,000 new applicants each year, about one in six being found ineligible. In most cases of ineligibility the applicants either have too much income or are below 65 years of age. The receipt of other types of assistance and refusal to provide information are also fairly frequent reasons for failure to qualify for the allowance.

More women than men are granted old age assistance. About half of the applicants granted assistance each year are married. More persons apply at age 65 than at any other age.

Among successful applicants more than half live in cities and towns. About half live in their own homes, the rest living with relatives, in rented accommodation or in institutions.

An important function of this division is to settle financial accounts with the provinces. All decisions on applications made by the provincial authorities are reviewed by federal examiners stationed in the provinces. Provincial accounts are audited in Ottawa. The federal share is paid monthly.

Statistical information concerning the 1960-61 operations appears at the end of the report on this division.



**Allowances for Blind Persons**

The provinces are responsible for the administration of blindness allowances and entitled to recover from the federal government 75 per cent of their expenditures up to a maximum of \$55 a month per person.

Allowances for the blind date back to 1937. The qualifying age under the present Blind Persons Act is 18.

There is little variation in the number of recipients, the highest number at the close of a fiscal year since the inception of the Blind Persons Act being 8,747.

In December of 1951, when operations under the Old Age Pensions Act were discontinued due to the introduction of universal federal pensions at 70 under the Old Age Security Act, blind pensioners over 70 numbering 3,212 were transferred to the administration of the new act. Those under 70 numbering 8,123 automatically came under the new Blind Persons Act.

The blind persons allowances scheme is not temporary in the same sense as the old age assistance scheme. About one in six applications in a year is from a person between 18 and 21 years of age. Blindness, however, being more prevalent among older persons, the number of applicants over 50 is usually more than half the total for a year.

The numbers of male and female applicants to whom allowances are granted are about equal. The number of unmarried applicants including widows and widowers generally exceeds the number of married applicants.

There are more recipients living in cities and towns than in villages or on farms and the majority are either in their own homes or living with relatives.

About 91 per cent of recipients qualify for the maximum amount of \$55 a month.

Of those who apply for blindness allowances but fail to qualify usually about 75 per cent cannot meet the medical test. The ratio of ineligible applicants to eligible applicants varies from year to year and is considerably higher than in the case of old age assistance.

Medical aspects of determination of eligibility are the responsibility of the Blindness Control Division.

The medical examination of applicants is a federal responsibility and the fees of examining oculists are paid by the federal government. There are about 1,200 to 1,500 examinations each year for new cases and a substantial number of re-examinations.

Statistical information on the 1960-61 operations appears at the end of the report on this division.

**Allowances for Disabled Persons**

Most recipients of disability allowances receive the maximum amount of \$55 a month. This figure, about 92 per cent, is much higher than old age assistance.

The disabled persons allowance is similar to the other two, in that the provinces administer the payments and the federal government pays 75 per cent of the cost.



Among persons whose applications are approved the number of men and women are about equal. Those living in cities and towns are about equal in number to those living in villages and on farms. More than half the applicants are over 50 years of age.

The number of applications varies but averages about 20,000 a year. The number of ineligible applicants is, as a rule, proportionally higher than in the case of blindness allowances. With both plans the major reason for failing to qualify is that applicants cannot meet the medical tests. However, substantial numbers of applicants are found to be ineligible because of excess income or failure to supply information. Each year several hundred applications are voluntarily withdrawn or are not completed due to the death of applicants.

Medical statistics show that in about 50 per cent of approved cases the disability is associated with mental disorders and diseases of the nervous system. Primary disabilities most frequently found are mental deficiency, arteriosclerotic and degenerative heart disease, schizophrenic disorders, neoplasms, epilepsy, other cerebral paralysis and rheumatoid arthritis and allied conditions. Diseases of the circulatory system have shown a tendency to decline and the same is true of diseases of the bones and organs of movement and infective and parasitic diseases.

Provincial authorities have, as a rule, joint medical review boards on which doctors appointed by both the federal and provincial governments serve. Provision is made for medical referees where federal and provincial doctors fail to agree.

The Old Age Assistance Division is responsible for the administration of disabled persons allowances. The Medical Rehabilitation and Disability Advisory Service in the Health Branch deals with matters related to medical examinations.

Statistical information on the 1960-61 operations appears at the end of the report on this division.



TABLE 43

STATEMENT OF FEDERAL GOVERNMENT PAYMENTS IN CONNECTION WITH ASSISTANCE TO  
THE AGED, BLIND AND DISABLED FOR  
THE FISCAL YEAR 1960-61

Province	Contributions to provincial payments					
	Old age assistance		Blind persons allowances		Disabled persons allowances	
	Number of recipients March, 1961	Contributions (65 years—Means test)	Number of recipients March, 1961	Contributions	Number of recipients March, 1961	Contributions
Newfoundland.....	5,342	\$ 1,707,883	422	\$ 208,131	1,220	\$ 389,074
Nova Scotia.....	5,395	1,608,129	786	380,911	2,704	847,957
Prince Edward Island.....	801	216,870	81	39,764	752	230,727
New Brunswick.....	5,555	1,746,572	696	341,686	1,963	633,555
Quebec.....	35,441	10,977,064	2,949	1,456,779	24,009	7,995,958
Ontario.....	22,736	6,629,557	1,845	840,964	13,307	4,163,397
Manitoba.....	5,098	1,600,650	380	187,226	1,415	455,373
Saskatchewan.....	5,727	1,769,693	409	196,127	1,449	464,153
Alberta.....	6,584	2,008,763	461	220,878	1,790	556,077
British Columbia.....	7,322	2,332,521	568	269,050	2,017	642,536
Northwest Territories.....	135	43,482	42	18,833	20	5,995
Yukon Territory.....	48	15,956	3	1,485	4	1,017
Totals.....	100,184	30,657,140	8,642	4,161,834	50,650	16,385,819



## UNEMPLOYMENT ASSISTANCE

With the achievement of nation-wide coverage under the Unemployment Assistance Act during the previous year, the administration of the act was strengthened during 1960-61 through the creation of the Unemployment Assistance Division.

The division administers agreements with the provinces through which the federal government contributes 50 per cent of the payments made by the provinces and the municipalities to recipients of general or unemployment assistance. The rates of assistance and the conditions under which it may be granted are determined by the province or its municipalities, except that each province has agreed not to make the length of an applicant's residence in the province a condition of assistance where the applicant has come from another province. The federal government shares in unemployment assistance paid both to employable and unemployable persons and in payments for the maintenance of persons in "homes for special care" such as homes for the aged and nursing homes.

The agreements provide for the exclusion of payments to recipients of mothers' allowances and payments made for medical, hospital, nursing, dental, and optical care, drugs and dressings, funeral expenses and costs of administration.

The federal government shares in additional assistance paid to needy persons in receipt of old age security pensions, old age assistance, blind persons allowances, disabled persons allowances and unemployment insurance benefits, where the assistance is determined through an assessment both of the recipient's basic requirements and of his resources. During the year, following discussions between federal and provincial officials, British Columbia, Alberta and Saskatchewan adopted plans for the conversion of their supplemental allowance programs to bring them into conformity with the act. A number of other provinces, during 1960-61, also made additional assistance payments, with federal financial participation.

Total federal expenditures for unemployment assistance during the year were \$51,520,085. Part of the expenditure, \$9,317,375, covered the federal share of claims for certain months prior to the fiscal year. A number of claims by the provinces for expenditures in the latter part of the fiscal year were received after the close of the year and the amounts involved will be included in the next annual report.

Table 44 shows the total payments by the federal government to the provinces under the agreements during 1960-61, and Table 45 sets out the federal share of assistance and the number of persons assisted during the first month in each quarter of the fiscal year.



TABLE 44

FEDERAL-PROVINCIAL UNEMPLOYMENT ASSISTANCE AGREEMENTS:  
FEDERAL PAYMENTS TO PROVINCES, BY PROVINCE, 1960-61

<i>Province</i>	<i>Payment</i>
Newfoundland .....	\$ 2,832,548
Prince Edward Island .....	110,952
Nova Scotia .....	1,609,453
New Brunswick .....	1,396,476
Quebec .....	14,164,527
Ontario .....	12,916,311
Manitoba .....	3,276,825
Saskatchewan .....	2,269,710
Alberta .....	2,555,920
British Columbia .....	10,313,342
Yukon Territory .....	53,610
Northwest Territories .....	20,413
Canada .....	51,520,085

\*Payments in a total of \$9,317,375 relate to claims for assistance paid prior to the fiscal year 1960-61.



TABLE 45

FEDERAL-PROVINCIAL UNEMPLOYMENT ASSISTANCE AGREEMENTS: FEDERAL SHARE OF ASSISTANCE\* AND PERSONS\*\* ASSISTED, BY PROVINCE, APRIL, JULY AND OCTOBER 1960 AND JANUARY 1961

Province	April 1960		July 1960		October 1960		January 1961	
	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.....	306,587	57,978	234,936	46,295	299,098	51,756	293,856	51,458
Prince Edward Island.....	10,921	1,898	10,360	1,505	14,135	1,588	15,708	2,020
Nova Scotia.....	151,688	20,389	128,441	18,945	158,153	20,877	168,274	22,995
New Brunswick.....	99,314	19,491	85,160	16,509	132,489	24,858	152,873	28,888
Quebec.....	832,943	66,690	1,108,312	75,091	1,413,558	102,945	1,931,592	155,436
Ontario.....	1,108,960	83,293	1,051,182	76,532	1,163,067	82,117	1,310,370	105,648
Manitoba.....	301,434	20,488	240,439	19,305	282,109	20,996	328,119	25,598
Saskatchewan.....	191,822	19,231	156,741	16,114	171,193	15,589	220,448	20,881
Alberta.....	210,795	19,747	196,310	17,683	227,199	18,993	296,979	24,565
British Columbia.....	737,548	43,403	837,513	46,388	1,025,447	62,203	1,242,029	80,555
Yukon Territory.....	2,772	93	1,900	110	2,898	112	3,394	117
Northwest Territories.....	1,373	146	1,473	179	1,274	160	2,142	227
CANADA.....	3,956,156	352,847	4,052,766	334,656	4,890,619	402,204	5,965,783	518,388

\* The amounts shown are for the months in which the assistance was granted rather than the months in which the federal share was paid to the provinces.

\*\* Includes dependents.



## Administration Branch

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

Because these divisions serve the entire department, both across Canada and overseas, increased activities throughout the department, as referred to elsewhere in this report, resulted in a continuing heavy volume of work for all divisions of the Administration Branch.

### DEPARTMENTAL SECRETARY'S DIVISION

The activities of the Departmental Secretary's Division continued to fall into two broad classes—those which the Departmental Secretary carried out personally and those which were undertaken largely by the staff of the division.

Included among the first group were (a) assisting the Minister and the Deputy Ministers in the long and complicated procedure related to the preparation and approval of the departmental estimates from the time they were first drafted until they were approved by Parliament; (b) acting as financial adviser to the department in respect of many aspects of its work; (c) acting as the Deputy Minister's substitute with respect to the approval of accounts payable, travel claims, requests for encumbrances, requests for transfer between allotments, submissions to Council and to Treasury Board, and other financial documents; (d) preparing material for tabling in Parliament; (e) acting as Departmental Security Officer; (f) organizing annual Community Chest, Canada Savings Bonds, Poppy Day and other campaigns within the department; (g) carrying out many special projects which were assigned from time to time.

The second group of responsibilities was borne by the various sections of the division as outlined in the following paragraphs.

The Registry Services continued to be responsible for records management throughout the department. This involved the operation of a central registry and nine sub-registries in Ottawa, and the provision of advice, assistance, and a certain degree of supervision in respect of records in many departmental establishments across Canada. During the year nearly 200,000 immigrant x-ray films were amalgamated to form one large x-ray film library equipped with special steel shelving. The records retirement program was actively pursued, resulting in considerable savings in space, equipment, and staff time. Mail, messenger and truck services at head office continued to be provided by this section.

The Financial Services Section continued to perform a centralized accounting advisory service designed to assist the directors and chiefs of divisions in the developing and budgeting of funds provided for their operational requirements.



This section also carried out much of the detail involved in the preparation of departmental estimates and continued to act as liaison between the department and the Treasury Office serving it.

The work of the Parliamentary Papers and Correspondence Section consisted largely of preparing replies to the many thousands of letters and enquiries which were received on a wide range of health and welfare subjects. This section was also responsible for processing, distributing, and recording all submissions, Orders-in-Council, Treasury Board Minutes, supplementary lists, Treasury Board circular letters, and other documents, and for the daily reading of all parliamentary papers and the excerpting, distributing, and indexing of items of interest to this department.

During the year under review the Addressograph Section, which services all divisions, addressed nearly 1,500,000 pieces of material from its extensive lists of addressograph plates.

A central source of typing assistance was again provided to the entire department in Ottawa by the Secretarial Services Section. As well, all typing and matrice work required in the preparation of material for reproduction by the Department of Public Printing and Stationery was done by the Secretarial Services. Varsityper facilities continued to be available.

In addition, the Departmental Secretary's office acted as an information centre for the entire department and carried out numerous special projects which normally fall to the lot of the secretariat of a large organization.

### INFORMATION SERVICES DIVISION

Work continued during the year in the fields of health and welfare information and public relations.

A staff shortage which existed for part of the year has been alleviated with the recent appointment of a health educator and the replacement of three information officers who had left the division.

Appointment of the health educator, first to be named to work with the department as a whole, is expected to make for greater effectiveness of the division, in view of the new appointee's professional background and experience.

#### ***The Printed Word***

The bulk of the division's work in publications consisted of reprints of books, booklets, folders and pamphlets but a number of new printed items were produced and distributed as well.

Among work done for the Indian and Northern Health Services Directorate was a "Clean-up" campaign, including auto bumper strips, a booklet, a poster and window cards. In addition, a book entitled *Eskimo Mortality and Housing* was produced for the same directorate.

Two publications for the Medical Rehabilitation and Disability Advisory Service, *Opportunities for Physiotherapists in Canada* and *Opportunities for Occupational Therapists in Canada*, were completed. A pamphlet, *Canadian*



*Hospital Insurance and Diagnostic Services Program*, was produced for the Health Services Directorate. A poster, *Is Your Well Water Safe?*, previously produced in English for the Public Health Engineering Division, was prepared in French. A book, *Meals for Serving Fifty*, was prepared for the Nutrition Division.

One of the major tasks of the division was production of the *Clark Report on Economic Security for the Aged in the U.S. and Canada*. It is a two-volume work.

The division produced annual reports on Old Age Assistance, Blind Persons and Disabled Persons for the Family Allowances and Old Age Security Division. A new film and filmstrip catalogue and a folder on the work of the Information Services Division were prepared.

Two of the Child Training pamphlets—*Fear* and *Obedience*—were revised for the Mental Health Division. Work done for the Dental Health Division included a poster—*The Loss of a Tooth*—and art revision on a pamphlet—*Ten Steps to Dental Health*. A pamphlet—*Medical Asepsis*—was completed for the Child and Maternal Health Division.

Some of the responsibility for Civil Defence information passed out of the hands of the division with the formation in September, 1959 of the Emergency Measures Organization. Despite this, the division produced a number of items for the Emergency Welfare Division, the Emergency Health Division and the Canadian Civil Defence College, including four issues of the *Civil Defence Bulletin* and a pamphlet titled *Mobile Feeding Stations*.

A smaller, more compact telephone directory for the Department of National Health and Welfare was produced. An organization chart was prepared for the Radiation Protection Division.

Mailing list screening cards, designed to bring mailing lists up to date, were prepared and used for a number of periodicals circulated by the department.

Displays were produced for the Food and Drug Directorate, the Occupational Health Division, the Health Services Directorate and the Information Services Division.

Designs and artwork were supplied for 31 separate jobs at the request of seven divisions.

Some 19,200 individual requests for material were received and a total of 5,865,000 pieces of literature were distributed, 4,417,000 in English and 1,448,000 in French.

The division produced and distributed 10 issues of *Canada's Health and Welfare*, including two supplements, comprising 720,000 copies. Also circulated were 3,660 copies of *National Health Radio Notes*, 5,100 copies of *Press Fillers*, 5,880 copies of *Canada's Health Column*, 2,530 copies of the *Medical Services Journal*.

### **Radio, Television and Films**

A promotion campaign staged in January, 1961 to increase coverage of the *Here's Health* series of radio dramas was most successful. It has resulted in the 10-minute weekly show, in its 12th consecutive year, now being carried on 127



radio stations across Canada, as compared with 109 last year. These include French-language stations, which carry the French Version—*A Votre Santé*.

The division, for the 19th consecutive year, prepared and distributed *National Health Notes*, *Radio Flashes* and the monthly *Radio Letter*.

Members of the division continued to exhibit keen interest in television as a medium of health education. Liaison was maintained with television stations and representatives. During the year a number of departmental consultants appeared on radio and television programs.

The continuing process of procuring, screening, and evaluating films was carried out. Twenty six were added to the National Health Film Library bringing the total number of films in the library to 463. The National Welfare Film Library has a total of 35 films and the National Medical and Biological Film Library has a total of 338 films with the addition of 3 new films. During the year, 1,823 films were booked from the National Health Film Library, 1,027 from the National Medical and Biological Film Library, and 85 from the National Welfare Film Library.

### ***The Camera at Work***

The Biological Photographic Laboratory produced 3,284 negatives, 11,358 black and white prints, 665 lantern slides, 712 color transparencies and 510 color prints.

The Food and Drug Directorate utilized the photographic facilities of the laboratory extensively during the year. A large number of starch gels containing enzymes and pesticides were photographed. Another project was the photographing of test sediment pads of milk as delivered to factories manufacturing cheese and milk powders. These pads represented the dirt present in one pint of milk. Prints were distributed to all members of the Dominion Council of Health and to all Ontario provincial cabinet ministers.

Laboratory staff organized the photomicrographic system covering changes in bacterial cells in response to gamma radiation. The photography of lesions developed in the stomachs of rabbits from a high cholesterol diet was also undertaken for the Food and Drug Directorate.

The Biological Photographic Laboratory produced a number of large murals covering photomicrographs of cell cultures and representative types of tumors in mice for a television program concerning activities at the Laboratory of Hygiene. Staphylococcus vaccine studies in rabbits using a commercial vaccine instead of the laboratory vaccine were photographed. A complete photographic coverage of activities at the Occupational Health Laboratories was undertaken.

In addition to the above scientific photography a large number of informational photographs in both black and white and color were produced for use in various publications.

### ***Public Relations***

Members of the division represented the department at a number of provincial, national and American conferences during the fiscal year.



Liaison with press, radio, television and the public was maintained by means of press releases, the provision of written and verbal answers to queries, facilitation of interviews and supplying news story leads and background information.

The director of the division established an important precedent with the School of Hygiene of the University of Toronto when he spoke to students there at the request of school authorities.

Members of the division addressed a group of overseas government administrators who visited the division office in March, 1961. The group of men, in Canada under the auspices of the Colombo Plan, the British West Indies Plan and other such technical aid programs, represented 10 countries. They were studying Public Administration at Carleton University.

### LEGAL DIVISION

The Legal Division provides legal services to the department in matters within departmental responsibility and concern. These services cover the furnishing of legal advice and opinion, including advice respecting prosecutions arising out of the administration of the Food and Drugs Act, the Opium and Narcotic Drug Act, the Family Allowances Act and the Old Age Security Act. The services of the division include the preparation of contracts and other legal documents, the interpretation of statutes and regulations and the preparation of memoranda and submissions to the Cabinet, the Governor-General-in-Council and to the Treasury Board.

Assistance was provided by the division during the year in the development of contracts and other material leading to the inclusion of the Province of Quebec and the Northwest Territories within the national Hospital Insurance and Diagnostic Services program.

The services of the Legal Division were also required in the revision and consolidation of certain of the regulations administered by the department preparatory to their submission to the Department of Justice, in the collection of overpayments made under the Family Allowances Act and the Old Age Security Act, and in the recovery of compensation for the loss of or damage to Crown property.

The Legal Division provided consultative legal services to a number of voluntary health agencies and organizations and the officers of the division represented the department on various boards concerned with policy and administrative matters in which the department has some interest or responsibility.

Early in 1961 the Legal Adviser completed the consultative services which he had been giving, at the request of the World Health Organization, to the Government of Trinidad, in the revision of public health legislation in that country. Later in the year he attended a conference of plenipotentiaries at the United Nations in New York, convened to adopt a single Narcotics Convention to replace the present nine multilateral treaties. The Legal Adviser, in addition to acting as head of the delegation, was elected chairman of the Drafting Committee and in due course signed on behalf of Canada the Single Convention on Narcotic Drugs which evolved therefrom.



## LIBRARY

The Departmental Library continued the selection, acquisition and organization of reference and technical books, serials, pamphlets, and government documents on all subjects related to the department's work for collections in Ottawa and in field establishments. The usual services of centralized ordering and cataloguing, answering questions and advising about authorities and sources of information were maintained.

From the volumes stored in the Public Records Building a collection was assembled and moved into the Jackson Building together with the master-catalogue of all library collections in the department. The staff of this library deal with reference inquiries and requests for inter-library loans except for those from the laboratories. A considerable number of books and periodicals remains in the Public Records Building because of shortage of space.

Staff concerned with all departmental library collections continue in offices in the Food and Drug Building. During the year attention was given to plans for the library in the prospective Administration Building.



This library in the Laboratory of Hygiene building in Tunney's Pasture contains a collection of the Departmental Library related to the work carried on by the research and control staff of the Laboratory of Hygiene.



Lists of medical books requested by 77 medical school libraries in South East Asia were examined for conformity to selection policy. Approximately 1,700 titles were identified and some 16,000 volumes were approved for order under the Colombo Plan Medical Book Scheme. Further assistance with the selection and procurement of books was given to the External Aid Office of the Department of External Affairs.

### **PERSONNEL SERVICES**

Personnel Services exists to provide assistance and advice to the other divisions of the department and, consequently, many of its activities are reflected in the reports of the other divisions. Advice and service is rendered to all levels of management and to individual staff members. The directorate's chief concerns relate to staff utilization and establishment; standards of performance and staff appraisals; transfers, promotions and reclassifications; class specifications and wage and salary determination; recruitment, training and development; appeals, grievances and staff morale; pay, leave and records administration; superannuation and insurance; staff health and welfare, and any other matters which bear on the organization and management of staff. The appended tables provide some indication of the extent of these activities.

Some highlights of the year's programmes are described below:

#### **Organization and Management**

Several organization and staff utilization studies and reviews were conducted during the year. As a result of the Annual Establishment Review, plans were approved to increase the departmental establishment by 99 full-time positions and reduce it by ten part-time positions so that at April 1, 1961 the total establishment becomes 5,255.

A major study of the department's organization was commenced in October, 1960, by the Advisory Services Branch of the Civil Service Commission. The purpose of this study is to make a general review of the organization structure; to make proposals to strengthen the plan of organization, if appropriate, and to identify specific activities or operations which would justify management analysis in detail. Much time has been devoted to this study by officers of the department in collaboration with Civil Service Commission officers with great profit. Already some recommendations are being put into effect.

An inter-departmental committee has been established to consider arrangements for the provision of medical services to the several divisions of the Department of Transport. Several improvements have been instituted and it is expected that similar committees will be set up to consider ways and means of improving the department's arrangement to provide service to other federal departments who require service or advice.

#### **Recruitment**

In collaboration with the Civil Service Commission, the department has introduced a new method of recruiting medical officers. Whereas, previously,



separate competitions were held to recruit to each position, officers are now recruited from a general competition. The recruit's early period of employment is regarded as a period of orientation which may lead to any one of a number of assignments depending on the department's requirements and the officer's interest. It is expected that this plan will appeal to young physicians who are interested in a varied career in the public service.

Although, after the general salary revision, authorized by the government in the summer of 1960 recruitment difficulties were reduced for many classes, difficulty is still being experienced in recruiting certain classes—particularly nurses and social workers.

Also, this department, like other health and welfare agencies, is hard pressed to find competent experienced personnel to fill intermediate and senior general administrative and planning positions requiring a combination of administrative skills and a knowledge of health and welfare economics.

### ***Training and Development***

Several officers have been granted educational leave to follow university courses which will enhance their usefulness to the department. The department has taken advantage of the courses for administrative and executive personnel and other courses offered by the Civil Service Commission. Of course, there is a great deal of on-the-job training conducted by supervisors. It is intended that this aspect of personnel administration should be intensified and plans have been approved to recruit an Administrator of Staff Development and Training Programmes.

### ***General Administration***

During the year, officers of Personnel Services have re-written the Personnel Services Manual and this will be published early in the new year. Also, the system of record keeping has been revised. The system recommended by Treasury Board has been adopted and a significant element of decentralization has been introduced into leave record keeping which has resulted in better control and some saving in staff.



TABLE 46  
STAFF SITUATION WITH SPECIAL REFERENCES TO PROFESSIONAL CLASSES

Classifications	Authorized Positions March 31/61	Vacant Positions March 31/61	Appointments During the Fiscal year	Terminations During the Fiscal year	Approximate Terminations per 100 positions	Transfers or Promotions involving a change in position	Promotions or Reclassifications not involving change in position
Physicians.....	314	32	23	26	8.03	22	34
Dentists.....	29	3	3	1		2	
Registered Nurses.....	732	59	187	183	25.	54	14
Chemists.....	106	1	11	4	3	3	6
Bacteriologists.....	38	2	1			2	3
Biologists.....	5	1		1			1
Librarians.....	6			1			
Pharmacists.....	9		3	2		2	
Laboratory Technicians.....	22	3	12	11		6	8
Nutritionists.....	8			3		2	2
Dietitians.....	12	2		2			
X-Ray Operators.....	39	11	5	1		4	1
Food and Drug Inspectors.....	80	2	6	3		12	3
Public Health Engineers.....	31	1	3	1		1	4
Social Workers.....	30	8					
Architects.....	4	1		1			1
Economists.....	19	2		1		3	1
Information Officers.....	8		4	1		1	1
Statisticians.....	12	2	2	1		1	
All other classes.....	3,662	264	678	530	14.1	294*	132*
Total.....	5,166	394	938	773	12.79	409	211

\*These Figures do not include—Ward Aides, Housemaids, Hospital Attendants.



TABLE 47  
GEOGRAPHICAL DISTRIBUTION OF ESTABLISHED FULL-TIME POSITIONS  
March 31, 1961

Location	Welfare Branch	Health Branch		Administration Branch	Total
		Indian and Northern Health Services	Other Services including Food and Drug		
Ottawa	43	79*	721	360	1,203
Yukon and Northwest Territories		273			273
British Columbia	72	541	59		672
Alberta	59	618	10		687
Saskatchewan	55	249	6		310
Manitoba	49	219	29		297
Ontario	402	434	62		898
Quebec	218	30	93		341
New Brunswick	42	1	15		58
Nova Scotia	53	7	54		114
Prince Edward Island	11		1		12
Newfoundland	31		12		43
Overseas			152		152
Total	1,035	2,451	1,214	360	5,060

\*Indian and Northern Health Services—47 of these positions are in Headquarters and 32 in the Eastern Regional Office which also happens to be located at Ottawa.



TABLE 48  
ESTABLISHMENT BY DIVISION  
March 31, 1961

Division	Full-Time Positions	Part-Time and Seasonal Positions	Division	Full-Time Positions	Part-Time and Seasonal Positions
Minister's Office.....	16		Nutrition.....	21	
Deputy Minister—Health.....	3		Nursing Consultant.....	2	
Deputy Minister—Welfare.....	10		Laboratory of Hygiene.....	147	5
Legal.....	7		Occupational Health.....	49	1
Library.....	16		Public Health Engineering.....	45	
Purchasing and Supply.....	35		Radiation Protection Services.....	46	
Information Services.....	34		Indian and Northern Health Services.....	2,451	66
Personnel Services.....	45		Food and Drug.....	324	10
Research and Statistics.....	61		Narcotic Control.....	29	
Departmental Secretary.....	134		Principal Medical Officer Medical Advisory Services.....	2	
Director Health Services.....	16		Civil Service Health.....	82	
Research Development and International Health.....	7		Civil Aviation Medicine.....	14	3
Environmental Health and Special Projects.....	4		Quarantine Immigration Medical Services.....	317	16
Health Insurance.....	11		Family Allowances and Old Age Security.....	887	
Health Grants.....	13		Old Age Assistance.....	18	
Blindness Control.....	4		Civil Defence College.....	110	
Child and Maternal Health.....	7		Emergency Health Services.....	30	
Dental Health.....	7		Emergency Welfare Services.....	19	
Epidemiology.....	15				
Hospital Design.....	7				
Medical Rehabilitation and Disability Advisory Services.....	5		Totals.....	5,060	106
Mental Health.....	10				



## PURCHASING AND SUPPLY DIVISION

The Purchasing and Supply Division continued to carry out its responsibility for procuring materials and equipment, entering into contracts and arranging services of all types for the various directorates, divisions, laboratories, hospitals, far-flung Arctic posts of the Indian and Northern Health Services and the overseas offices of the Immigration Medical Service.

The amount of technical and scientific equipment purchased for the various laboratories in Ottawa increased, particularly that developed to meet new advances in the electrical, electronic and nuclear radiation fields of instrumentation.

Approximately 13,800 requisitions were processed, comprising almost every commodity and involving orders placed with manufacturers in Canada, the United States, the United Kingdom and Continental Europe. This necessitated the issuance of over 11,000 enquiries to the trade for prices and delivery and the processing of more than 22,600 invoices. Included in this work and in the expediting necessary to follow up on deliveries was the preparation of 11,300 pieces of correspondence and follow-up cards. There were 201 enquiries from the Public Works Department concerning space outside Ottawa and 658 requisitions were sent to that department in connection with the alteration, maintenance, and repair of departmental premises.

The Departmental Stores handled 1,500 incoming shipments comprising more than 27,500 pieces. Approximately 11,300 pieces were shipped out in the same period involving the preparation of nearly 5,400 issue vouchers. Inventory value of stock in the stores at the end of the year amounted to approximately \$98,200.

During the year also 27 replacement vehicles were purchased and 27 new vehicles added to the departmental fleet; 13 vehicles were disposed of, 10 Civil Defence vehicles going to the Canadian Broadcasting Corporation. At the end of the fiscal year the department had 274 vehicles in operation.

## RESEARCH AND STATISTICS DIVISION

The place that the division has occupied in health and welfare research in Canada received recognition during the year in the appointment of the director as Deputy Minister of Welfare. During the same period a number of the division's senior officers moved to new responsibilities. Although a new director had not been appointed by the end of the year the division had demonstrated the strength-in-depth of its personnel in the way new research programs were initiated and the way in which those established were carried on.

The largest single project undertaken in 1960-61 was the Manitoba Hospital Survey, of which the director was chairman and in which Manitoba Hospital officials and division officers co-operated. A number of comprehensive bulletins were published, including *Legislative Measures Affecting Living Accommodation for Elderly Persons in Canada*, *Rehabilitation Services in Canada—Part I—A General Review*, *Voluntary Medical Insurance in Canada, 1958*, and *Hospital*



*Care in Canada: Recent Trends and Developments.* The final report of the Canadian Sickness Survey, on which the division had co-operated for a number of years with the Health and Welfare Division of the Dominion Bureau of Statistics, was also published. Officers of the division took an active part on departmental and other committees and a number of papers were presented by them at conferences. A senior statistician was loaned, under WHO auspices, as a consultant to the Ministry of Health of Jamaica, to advise on and organize a study of the island's public health inspection and nursing personnel.

### **Hospital Insurance**

The division continued to work closely with the Principal Medical Officer, Health Insurance, and agencies concerned with the hospital insurance and diagnostic services program. Staff members provided consultation to provincial authorities and prepared per capita cost estimates for in-patient services in Canada, to serve as the basis for determining federal advances to the provinces in 1961. Final costs and payments to the provinces for 1959 were determined. Staff members assisted Quebec health authorities during the development of the hospital insurance program in that province. Similar assistance was given the Northwest Territories and Yukon Territory administrations. The division collaborated with the Dominion Bureau of Statistics in revising hospitals' annual return forms. Staff members worked on special studies of long-term hospital care programs, quality of care, and financing of services and statistics.

A series of indices of hospital services was developed for use in the administration of the act. The Principal Research Officer (Biostatistics) presented a paper on "The Selection of Diagnostic Groups for Hospital Statistics" at the 1960 Canadian Public Health Association Meeting and different staff members took part in hospital accounting and statistics institutes.

Division members continued to serve on the federal-provincial subcommittees on Quality of Care and Research and Statistics, Finance and Accounting, and Residence and Uniformity of Benefits.

### **Hospital Services**

The Manitoba Hospital Survey Board Report was tabled in the provincial legislature on 23rd March, 1961. The study, which was established at the request of the Manitoba Government to survey active treatment and chronic hospital facilities, personnel and requirements was another in the series of technical assistance projects in which the division has assisted different provinces and other countries. The board carrying out the study was asked to survey and advise on the adequacy and distribution of bed accommodation in the province, and the relative needs for chronic, convalescent and active treatment facilities; the relationship of long-term facilities to alternative care provisions and the adequacy of hospital personnel and training facilities. Work on some remaining sections of the study was continuing at the end of the year.

A survey of psychiatric units, requested by the National Advisory Committee on Mental Health, was completed. It provided detailed information on methods, admission policies, after care programs and related subjects.



The bulletin *Hospital Care in Canada: Recent Trends and Developments* gave a detailed analysis of trends in the last decade for general and allied special hospitals, mental institutions and tuberculosis institutions, utilization of hospital services, bed facilities and requirements, personnel and auxiliary services, operating and capital costs and arrangements for financing. It also included a review of federal hospital insurance legislation and a comparative study of major features of provincial hospital insurance programs.

### **Medical Care Services**

In addition to the publication of *Voluntary Medical Insurance in Canada, 1958*, bulletins based on 1959 and 1960 data were commenced. New data was assembled for bulletins in the two series, *Health Services for Public Assistance Recipients in Canada* and *Public Medical Care Programs in Canada*. Continuing analyses were made of medical and related health care expenditures in Canada.

### **Radiation Research**

With the Radiation Protection Division, an analysis was made of first results in a study of variability in Strontium 90 estimates in dried milk samples. Tabulations were carried out for the Film Monitoring Service's 1959 annual report, and a start made on 1960 records. A sampling plan was prepared for collection of human bone specimens for Strontium 90 determination. Consultation was provided on possible genetic studies and regarding a proposed British Columbia follow-up study of women irradiated during pregnancy. Progress was made on a report on X-Ray diagnostic examinations and gonadal dose estimates for Canada. The Principal Research Officer was asked by the International Commission on Radiological Protection and Radiological Units to review and comment on a report entitled "Exposure of Man to Ionizing Radiation Arising from Medical Procedures with Special Reference to Radiation Induced Diseases". The pilot project carried out with the Epidemiology Division of children of women irradiated during pregnancy was completed.

### **Other Health Research**

A preliminary report was prepared, with the Epidemiology Division, on *A Canadian Study of Mortality in Relation to Smoking Habits*, for presentation at the Canadian Public Health meeting and subsequent publication in the Canadian Journal of Public Health. Poliomyelitis statistics were analyzed for the Epidemiology Division's reports to the Dominion Council of Health and the Canadian Public Health Association. For the survey of health unit services in Canada being carried out with the Epidemiology Division and the School of Hygiene of the University of Toronto, a questionnaire was prepared and progress made in analysis of returns. The Child and Maternal Health Division was assisted in a survey of maternal and newborn care in hospitals, through the selection of a sample of hospitals and in the preparation of the reporting schedule. Aid was given to the Consultant on Fitness and Amateur Sport in the analysis and evaluation of test results and in the investigation of potential uses of special studies which had



been carried out. Extensive analytical work was carried out in the investigation of the health of Newfoundland fluorspar miners, by the Occupational Health Division. Work was continued on the analysis of results from the *Survey of Physicians (1959)*.

Further analyses were made in fluoridation studies for the Dental Health Division. The Principal Research Officer (Biostatistics) appeared with the Dental Health Consultant before the Ontario Fluoridation Committee.

Quarterly and annual reports for the Northern Health Services Medical Care Program were completed as well as 1958 and 1959 tabulations on the Poison Control Program of the Food and Drug Directorate.

### **Rehabilitation**

The bulletin *Rehabilitation Services in Canada, Part I, General Review*, was published and distributed to health and welfare agencies, rehabilitation centres, hospitals, teaching schools and interested professionals. A French translation of the already published companion volume, *Part II, Provincial and Local Programs*, was also brought out.

### **Welfare**

The French edition of *Mothers' Allowances Legislation in Canada, 1960* was issued during the year. Articles were published in the "Labour Gazette" on changes in provincial general assistance programs, mothers' allowances and services for the aged. A similar study was prepared on child welfare.

Provincial chapters of the bulletin on programs for accommodation for the aged were submitted to the provinces for approval. Remaining chapters were ready for publication early in the new fiscal year.

Work continued on problems of elderly and chronically-ill persons for the Departmental Committee on Chronic Illness and Health Problems of the Ageing. The Welfare Section Supervisor served on the Inter-departmental Committee on Older Workers and the National Committee on Ageing, of the Canadian Welfare Council. She was one of two departmental observers at the White House Conference on Ageing.

The division's contribution to the study of families afflicted with aniridia, a hereditary eye disease, was completed. A report on the findings was published in the Archives of Ophthalmology (January 1961).

Among memoranda prepared were planning for older people, residence requirements for various services, family budgets and levels of living, social assistance and welfare grants, institutional care, child welfare and adoptions, and juvenile delinquency.

The supervisor served on the Advisory Board of "Canadian Welfare". Staff were active on various technical and advisory committees.

A reference paper was prepared as a guide to welfare and related services, for the use of groups interested in Canadian welfare resources for technical assistance to other countries.



### **Income Security**

Changes in old age pension schemes of Commonwealth and other countries were followed closely, including the introduction of the new graduated pension program in Great Britain, which came into effect in April, 1961, and changes in the old age, survivors, and disability insurance program in the United States. Drafts of bulletins on old age security in New Zealand and in Australia were revised to incorporate recent important amendments to the legislation in those countries.

The Supervisor of the Income Security Section attended the organizational and other meetings of the Canadian Pension Conference and worked closely with the Dominion Bureau of Statistics in a survey of pension plans in Canada.

An extensive memorandum was completed on expenditures by all levels of government for health and social welfare over a period of years. Preliminary steps were taken toward the design of a quarterly statistical bulletin.

A bulletin on the statistics of the disability allowances program for the three fiscal years 1957-58 to 1959-60 was prepared. Provincial supplements payable to certain recipients of the categorical programs were described in a memorandum.

Material was prepared for the International Social Security Association on developments in social security in Canada in the years 1958 to 1960 inclusive, and for the International Labour Organization, on the proposed convention for equality of treatment of nationals and non-nationals and on the convention on minimum standards of social security.



# DEPARTMENT OF NATIONAL HEALTH AND WELFARE

## DIRECTORY OF DEPARTMENTAL OFFICERS

### MINISTER

HONOURABLE J. WALDO MONTEITH, P.C., M.P., F.C.A.

*Executive Assistant*, C. KEEDWELL, M.A.

*Private Secretary*, D. H. DUNSMUIR

*Deputy Minister of National Health and Welfare (Health)*

G. D. W. CAMERON, M.D., C.M., D.P.H., LL.D., F.R.C.P.

*Deputy Minister of National Health and Welfare (Welfare)*

J. W. WILLARD, Ph.D., M.A., M.P.A., A.M.

### HEALTH BRANCH

#### FOOD AND DRUG DIRECTORATE:

FOOD AND DRUG DIRECTORATE—*Director*, C. A. Morrell, M.A., Ph.D., F.R.S.C.

*Assistant Director*, L. I. Pugsley, B.A., M.Sc., Ph.D.

*Assistant Director (Scientific Services)*, R. A. Chapman, B.S.A., M.Sc., Ph.D.

*Assistant Director (Inspection and Enforcement Services)* A. Hollett, B.Sc., M.Sc.

*Chief, Proprietary or Patent Medicines Division*, P. Soucy, Phm.B.

#### *Regional Directors:*

Nova Scotia, Halifax, L. B. MacIsaac,

Quebec, Montreal, P. E. Jean,

Ontario, Toronto, H. E. Woodward,

Manitoba, Winnipeg, H. A. Watson,

British Columbia, Vancouver, H. O. Tomlinson.

#### INDIAN AND NORTHERN HEALTH SERVICES DIRECTORATE:

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*Associate Director, Medical*, H. A. Procter, D.S.O., M.D., Ph.D.

*Associate Director, Administration*, W. B. Brittain, D.F.C., B.Sc.

*Chief, Northern Health Division*, J. Willis, M.D., D.P.H.

#### *Regional Superintendents:*

Eastern Region, Ottawa, J. H. Wiebe, B.A., M.D., M.P.H.

Central Region, Winnipeg, W. J. Wood, B.A., M.D., D.P.H.

Saskatchewan Region, Regina, T. J. Orford, M.D., C.M.

Foothills Region, Edmonton, W. L. Falconer, M.D.

Pacific Region, Vancouver, W. S. Barclay, M.D.

#### HEALTH SERVICES DIRECTORATE:

*Director*, K. C. Charron, M.D., C.M.

*Principal Executive Officer*, J. H. Horowicz, LL.D.



*Principal Medical Officers:*

Environmental Health and Special Projects, E. A. Watkinson, M.D., C.M., D.P.  
 Health Insurance, E. H. Lossing, M.D., D.P.H.  
 National Health Grants, G. W. Wride, M.D., D.P.H.  
 Research Development, L. B. Pett, B.S.A., M.A., Ph.D., M.D., D.P.H.  
 International Health, B. D. B. Layton M.D., M.P.H.

**SPECIAL HEALTH SERVICES:**

Blindness Control Division, *Chief*, O. Hoffman, M.D.  
 Child and Maternal Health Division, *Chief*, J. F. Webb, B.Sc., M.D., D.P.H.  
 Dental Health Division, *Consultant*, H. K. Brown, D.D.S., D.D.P.H., LL.D.,  
 F.A.C.D., F.I.C.D.  
 Emergency Health Services Division, *Chief*, A. C. Hardman, M.D.  
 Epidemiology Division, *Chief*, E. W. R. Best, M.D.  
 Hospital Design Division, *Chief*, H. E. Hughes, B.Arch, A.R.I.B.A., M.R.A.I.C.  
 Laboratory of Hygiene, *Director*, J. Gibbard, B.S.A., S.M., F.R.S.C.  
 Medical Rehabilitation and Disability Advisory Service, *Consultant*, B. Primeau,  
 M.D., M.P.H.  
 Mental Health Division, *Chief*, Morgan Martin, M.D., C.M., M.Sc.  
*Chief Nursing Consultant*, D. M. Percy, R.R.C., R.N.  
 Nutrition Division, *Chief*, J. E. Monagle, B.Sc., M.D.  
 Occupational Health Division, *Chief*, T. H. Patterson, M.D., D.P.H., M.P.H.  
 Public Health Engineering Division, *Chief*, J. R. Menzies, B.A.Sc., C.L.S.C.E.  
 Radiation Protection Division, *Chief*, P. M. Bird, M.Sc., Ph.D.

**MEDICAL ADVISORY SERVICES:**

*Principal Medical Officer*, R. G. Ratz, M.D.  
 Civil Aviation Medicine Division, *Chief*, W. A. Prowse, M.D., C.M., D.P.H.  
 Civil Service Health Division, *Chief*, E. L. Davey, M.D., D.P.H.  
 Quarantine Immigration Medical and Sick Marines Services, *Chief*, W. H. Frost,  
 M.D., D.P.H.

**NARCOTIC CONTROL DIVISION:**

*Chief*, R. C. Hammond, Phm.B.

**WELFARE BRANCH****FAMILY ALLOWANCES AND OLD AGE SECURITY DIVISION:**

*Director*, J. Albert Blais  
*Assistant Director*, R. H. Parkinson, B.A.  
*Chief Supervisor*, Welfare Services, W. W. Struthers, B.A., B.S.W.

*Regional Directors:*

Newfoundland, St. John's, L. C. Abbott  
 Prince Edward Island, Charlottetown, J. E. Green  
 Nova Scotia, Halifax, M. T. Blue  
 New Brunswick, Fredericton, A. Nicholson  
 Quebec, Quebec, J. M. L. Lafrance, B.S.A.  
 Ontario, Toronto, W. F. Hendershot  
 Manitoba, Winnipeg, W. H. Davis, D.P.A.  
 Saskatchewan, Regina, R. J. G. Mitchell  
 Alberta, Edmonton, W. W. Dahl  
 British Columbia, Victoria, W. R. Bone  
 Yukon and Northwest Territories, Ottawa, Miss Norma O'Brien, B.A.



**OLD AGE, BLIND AND DISABLED PERSONS' ASSISTANCE DIVISION:***Director, J. W. MacFarlane***UNEMPLOYMENT ASSISTANCE BRANCH:***Director, R. B. Splane, M.A., M.S.W.***INTERNATIONAL WELFARE DIVISION:***Director, J. A. MacDonald, B.A.***EMERGENCY WELFARE SERVICES:***Director, P. H. Stehelin, LL.B.***CIVIL DEFENCE COLLEGE—ARNPRIOR:***Commandant, C. L. Smith***FITNESS AND AMATEUR SPORT:***Consultant, Doris W. Plewes, M.A., B.Paed, Ed.D.***ADMINISTRATION BRANCH**Departmental Library, *Departmental Librarian, Mary D. Morton, B.H.Sc., B.L.S.*Departmental Secretary, *Olive J. Waters*Information Services, *Director, Harvey W. Adams*Legal Services, *Legal Advisor, R. E. Curran, Q.C., B.A., LL.B.*Personnel Services, *Director, E. J. Preston, M.A.*Purchasing and Supply Division, *Acting Chief, J. K. Wilson*Research and Statistics Services, *Director, Vacant***TRANSLATION***Chief, G. A. Sauvé***TREASURY OFFICE***Chief, T. F. Phillips*



## DIRECTORY OF DEPARTMENTAL ESTABLISHMENTS

### ADMINISTRATIVE OFFICES

#### OTTAWA

Jackson Building, Bank Street  
Birks Building, Sparks Street  
Booth Building, Sparks Street  
Garland Building, Queen Street  
No. 1 Temporary Building, Wellington Street  
No. 3 Temporary Building, Wellington Street  
Trafalgar Building, Queen Street  
Daly Building, Mackenzie Avenue  
Copeland Building, Albert Street  
Vimy Building, Sparks Street

### CIVIL DEFENCE COLLEGE

ARNPRIOR, ONT.—P.O. BOX 2050

### FAMILY ALLOWANCES AND OLD AGE SECURITY

ST. JOHN'S, Nfld.	29 Buckmasters' Field
CHARLOTTETOWN, P.E.I.	Dominion Building
HALIFAX, N.S.	Ralston Building
FREDERICTON, N.B.	Federal Building
QUEBEC, P.Q.	51 Boulevard des Capucins
TORONTO, Ont.	25 St. Clair Ave., East, Toronto 7
WINNIPEG, Man.	138 Portage Ave. East
REGINA, Sask.	Dominion Government Building
EDMONTON, Alta.	Federal Building
VICTORIA, B.C.	Federal Building

### FOOD AND DRUG LABORATORIES

OTTAWA, Ont.	Tunney's Pasture
HALIFAX, N.S.	Ralston Building
MONTREAL, P.Q.	Customs House, Youville Square
TORONTO, Ont.	55 St. Clair Ave. East
WINNIPEG, Man.	Dominion Public Building
VANCOUVER, B.C.	Federal Building

### FOOD AND DRUG OFFICES

OTTAWA, Ont.	Tunney's Pasture
HALIFAX, N.S.	Ralston Building



CHARLOTTETOWN, P.E.I.	Confederation Building
SAINT JOHN, N.B.	New Customs Building
SYDNEY, N.S.	Federal Building
ST. JOHN'S, Nfld.	Sir Humphrey Gilbert Building
QUEBEC, P.Q.	375 Dorchester Street
THREE RIVERS, P.Q.	Post Office Building
SHERBROOKE, P.Q.	315 King Street, West
MONTREAL, P.Q.	Customs House, Youville Square
TORONTO, Ont.	55 St. Clair Ave. East
BELLEVILLE, Ont.	New Federal Building
HAMILTON, Ont.	National Revenue Building
KITCHENER, Ont.	Dominion Public Building
LONDON, Ont.	Dominion Public Building
WINDSOR, Ont.	Dominion Public Building
SUDBURY, Ont.	New Federal Building
PORT ARTHUR, Ont.	33 Court Street South
WINNIPEG, Man.	Dominion Public Building
BRANDON, Man.	Federal Building
SASKATOON, Sask.	307 London Building
REGINA, Sask.	713 Motherwell Building
CALGARY, Alta.	Customs Building
EDMONTON, Alta.	Federal Building
KAMLOOPS, B.C.	345 Victoria Street
VANCOUVER, B.C.	Federal Building
VICTORIA, B.C.	Belmont Building

### IMMIGRATION MEDICAL SERVICE OFFICES

#### Canada

ST. JOHN'S, Nfld.	Sir Humphrey Gilbert Building
GANDER, Nfld.	Gander Airport
STEPHENVILLE, Nfld.	Harmon Field Airport
SYDNEY, N.S.	Marine Hospital and Reserve Airport
HALIFAX, N.S.	Immigration Building, Pier 21, and International Airport, Kelly Lake
MONCTON, N.B.	Moncton Airport
SAINT JOHN, N.B.	Immigration Building, Pier 9
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
TORONTO, Ont.	175 Bedford Road
MALTON, Ont.	Toronto International Airport



WINDSOR, Ont. ....	Windsor Airport
LONDON, Ont. ....	London Airport
FORT ERIE and NIAGARA FALLS, Ont. ....	P.O. Box 1001, Fort Erie
WINNIPEG, Man. ....	Immigration Hall, 83 Maple St., and Winnipeg International Airport
EDMONTON, Alta. ....	Edmonton Airport
VANCOUVER, B.C. ....	Immigration Building, foot of Burrard Street and Vancouver International Airport
VICTORIA, B.C. ....	816 Government Street

### Overseas

LONDON, England ....	61 Green Street, Mayfair, W.1
BELFAST, Northern Ireland ....	22 North Street
BRISTOL, England ....	5-18 Wine Street
GLASGOW, Scotland ....	18 Woodlands Terrace, C.3
LEEDS, England ....	5-7 New York Road
LIVERPOOL, England ....	34 Moorfields, Liverpool 2
BRUSSELS, Belgium ....	230 rue Royale
PARIS, France ....	38 Avenue de l'Opera
ROME, Italy ....	Via Acherusio Sud 9
THE HAGUE, Holland ....	12 Carel Van Bylandtlaan
COPENHAGEN, Denmark ....	Canadian Legation, Vestagervej 5
BERLIN, Germany ....	Berlin-Charlottenburg 2, Uhlandstr. 20-25 Aufgang II
COLOGNE, Germany ....	Canadian Embassy, Visa Section, Buchheimerstrasse 64-66, Weiner Platz, Cologne- Meulheim
MUNICH, Germany ....	Josefshospitalstrasse 7/4, Muenchen 2
STUTTGART, Germany ....	Marquardt Gebaeude, Koenigstrasse 20
HAMBURG, Germany ....	Canadian Consulate, Visa Office, Admiralitaetstrasse 46
BERNE, Switzerland ....	Canadian Embassy, Medical Section, Neuengasse, Interhaus, 2nd Floor
VIENNA, Austria ....	Canadian Embassy, Medical Section, Tuchlauben 8, Vienna 1
ATHENS, Greece ....	Canadian Embassy, Visa Office, 54A Queen Sofia Street
HELSINKI, Finland ....	Canadian Embassy, Visa Office, Bulevardi 10A



**SICK MARINERS CLINICS AND HOSPITALS**

HALIFAX, N.S.	Immigration Building, Pier 21
SYDNEY, N.S.	Marine Hospital
SAINT JOHN, N.B.	Immigration Building, Pier 9
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

**QUARANTINE STATIONS AND SUB-STATIONS**

GANDER, Nfld.	Gander Airport
ST. JOHN'S, Nfld.	Sir Humphrey Gilbert Building
SYDNEY, N.S.	Marine Hospital and Airport
HALIFAX, N.S.	Pier 21 and International Airport, Kelly Lake
SAINT JOHN, N.B.	Pier 9 and Isolation Hospital, Lancaster
QUEBEC, P.Q.	Champlain Harbour Station, Wolfe's Cove
MONTREAL, P.Q.	150 St. Paul Street West 320 Baldwin Street
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

**INDIAN AND NORTHERN HEALTH SERVICES**

EASTERN	Room 1128, Trade and Commerce Building, Wellington and Lyon Streets Ottawa
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CENTRAL .....	705 Commercial Building, 169 Pioneer Ave., Winnipeg
SASKATCHEWAN .....	735 Motherwell Building, Regina
ALBERTA .....	11344, 128 St., Edmonton
BRITISH COLUMBIA .....	4824 Fraser Street, Vancouver

### LABORATORY OF HYGIENE

OTTAWA, Ont. ....	Tunney's Pasture
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### OCCUPATIONAL HEALTH LABORATORIES

OTTAWA, Ont. ....	45 Spencer Street
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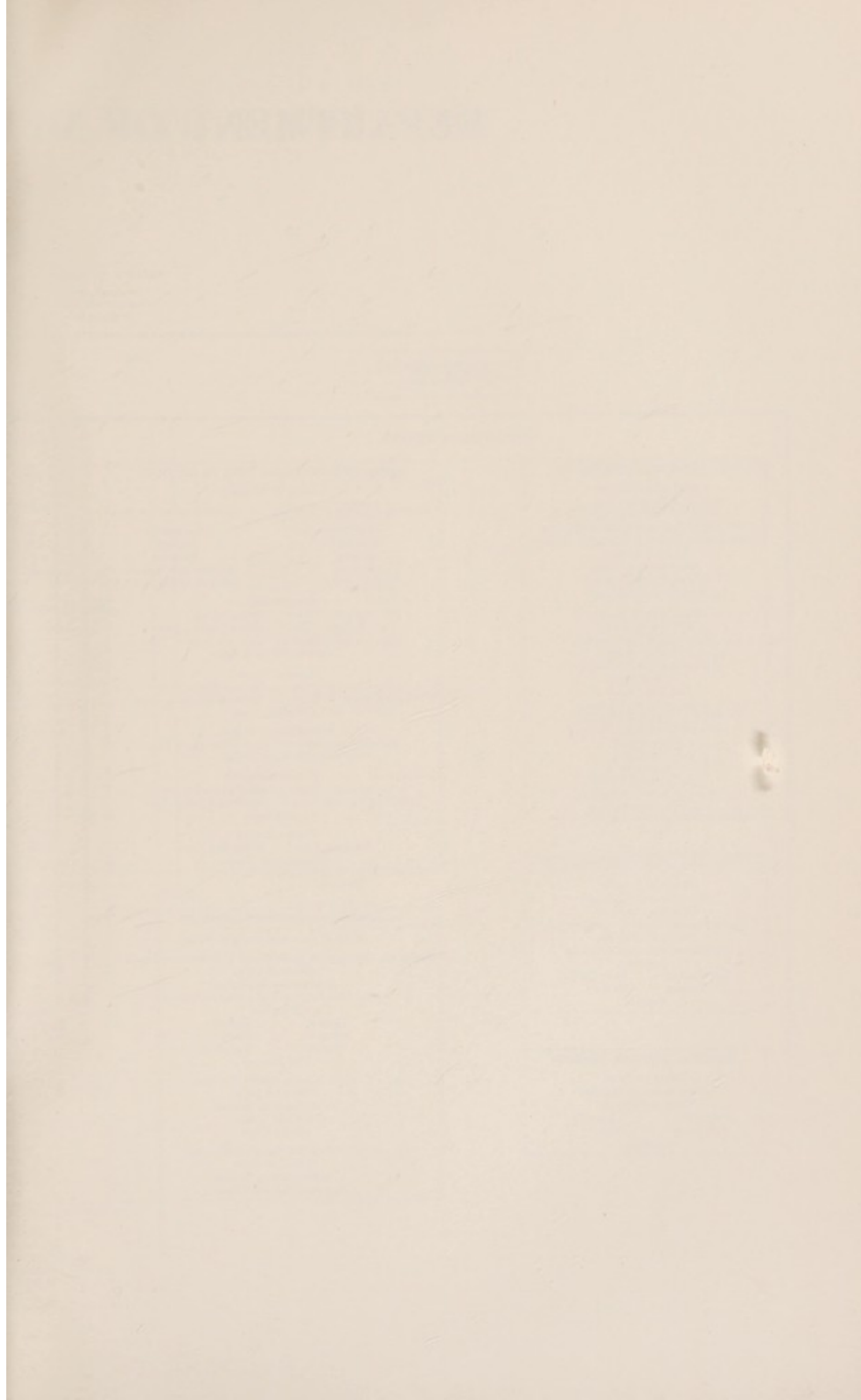
### PUBLIC HEALTH ENGINEERING DISTRICT OFFICES

TRURO, N.S. ....	P.O. Box 608, Federal Building
MONCTON, N.B. ....	P.O. Box 86
MONTREAL, P.Q. ....	150 St. Paul Street West
ST. CATHARINES, Ont. ....	Dominion Building
PORT ARTHUR, Ont. ....	Post Office Building
ST. BONIFACE, Man. ....	Post Office Building
REGINA, Sask. ....	Motherwell Building
EDMONTON, Alta. ....	Federal Public Building
VANCOUVER, B.C. ....	Room 509, Federal Building

### RADIATION PROTECTION

OTTAWA, Ont. ....	305 Vimy Building
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CENTRAL	705 Commercial Building
WINNIPEG	169 Pioneer Ave., Winnipeg
ENCLAVE	735 Motherwell Building, Regina
ALBERTA	11344, 128 St., Edmonton
BRITISH COLUMBIA	4824 Fraser Street, Vancouver

## LABORATORY OF HYGIENE

OTTAWA, Ont.	Esso's Future
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## OCCUPATIONAL HEALTH LABORATORIES

OTTAWA, Ont.	45 Spencer Street
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## PUBLIC HEALTH ENGINEERING DISTRICT OFFICES

TRURO, N.S.	P.O. Box 608, Federal Building
MONCTON, N.B.	P.O. Box 86
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ST. BONIFACE, Man.	Post Office Building
REINA, S.A.	Motherwell Building
EDMONTON, Alta.	Federal Public Building
VANCOUVER, B.C.	Room 509, Federal Building

## RADIATION PROTECTION

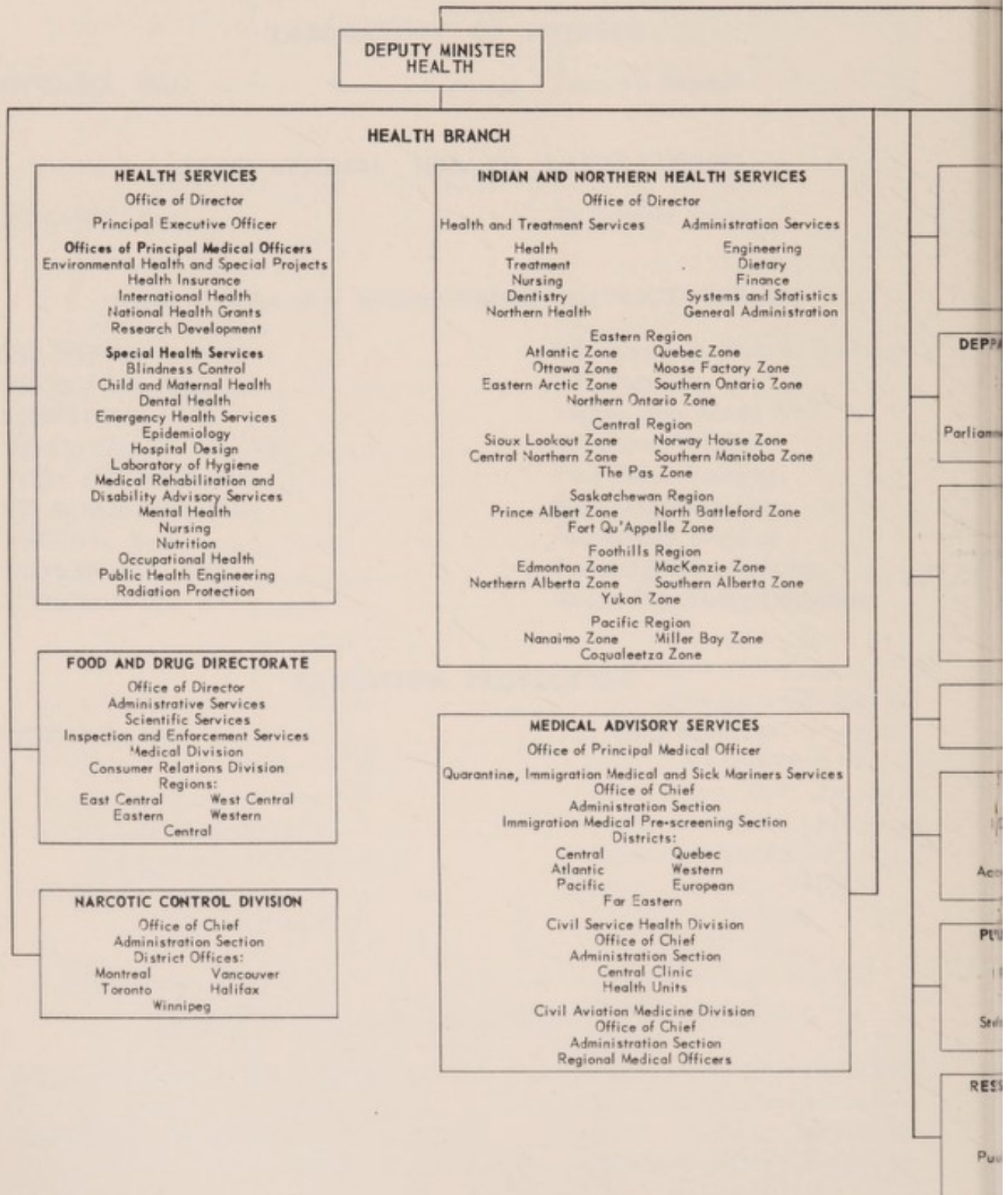
OTTAWA, Ont.	305 Viny Building
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# DEPARTMENT OF NATI





# L HEALTH & WELFARE

