

On the invitation of the National Foundation for Infantile Paralysis in the United States consideration was given to Canadian participation in the United States field trials held in 1954\* in which about 1,830,000 children were involved. Three groups of children in the Provinces of Nova Scotia, Manitoba and Alberta were included in the trials.

The question of production of vaccine in Canada was considered at the 65th meeting of the Dominion Council of Health in May 1954. The immediate need, should the United States trials prove successful, was estimated at that time and provincial deputy ministers of health were provided with data on costs (\$1.50 per triple dose) and quantities of the vaccine which might be available to each.

Planning at that time and subsequently was complicated by uncertainty as to the results of the field trials but close attention to the situation in the United States generally indicated that at least sufficient success would be attained to justify extensive production of vaccine. In discussions with the Provinces during the summer of 1954 it was agreed that vaccine produced for use in 1955 and supplied free to all children would be financed by the Federal Government and the Provinces on a fifty-fifty basis through the use of funds from the National Health Program. Between June and November all provinces submitted projects under the program. Production of sufficient vaccine for 500,000 children in 1955 was commenced at the Connaught Laboratories and discussions began with the Institute of Microbiology and Hygiene where the building of special accommodation was commenced for this purpose.

#### PRODUCTION AND DISTRIBUTION

At the 66th meeting of the Dominion Council in October 1954 the United States evaluation trial was reviewed in detail. The Director of the Connaught Laboratories reported that no known complications or serious reaction had resulted from use of the vaccine among a quarter of a million children, that significantly high antibody titres had been encountered and that no adverse reaction had been ascertained from the introduction of *Rhesus* monkey tissue. He pointed out however that there were many serious problems associated with the use of the vaccine which would require extensive research to solve.

After consideration of this report the Council endorsed the decision to proceed with preparations for the distribution of vaccine on an experimental basis and reached agreement as to the circumstances under which it might be used. The following statement of principles was adopted by the Council at that time:—

- (1) That priority in the receipt of the vaccine be reserved for children in the five and six year age groups, it being noted that attack rates at these ages are high and that infection in these children constitutes a threat to older children. The number of children in kindergarten, primary and grade 1 of Canadian schools is estimated to be approximately 500,000 in 1955. In addition, the implied obligation to give vaccine to children who received the "control" material in the vaccine trials in three provinces in 1954 be recognized.
- (2) That, in the event further vaccine should be available after meeting requirements of (1) above, the four year old group should receive next priority.
- (3) That, while the desirability of recording the incidence of paralysis in vaccinated and unvaccinated children in these age groups should be noted, the administration of the vaccine does not need to be accompanied by the administration of a "control" material or the taking of blood specimens for antibody estimation.
- (4) That, since it was to be expected the vaccine would be available for distribution by early March, it would be highly desirable to complete the course of injections of the vaccine not later than the end of April, if the necessary permission for distribution is obtained from the Federal authority.
- (5) That, it should be understood that pending publication of results of the current Poliomyelitis Vaccine Evaluation study, the use of the vaccine remains on an experimental basis and should not be offered to the public as a proven immunizing measure.

\* In the United States trials about 440,000 children received one or more injections of vaccine and about 210,000 a placebo substance consisting of the nutrient material in which the virus was grown. Over 1,100,000 children in 44 States served as observed controls. About 40,000 children from these three groups gave one or more and generally three blood samples which were tested for poliomyelitis antibodies in 27 laboratories in the United States and Canada.