Questions

over the past five years. In each of three provinces—Newfoundland, Prince Edward Island and Manitoba—not a single death from polio was reported during 1955.

5. The use of the Salk vaccine in Canada during 1955 was the most ambitious mass immunization program ever undertaken in this country. It also provided an opportunity for carrying out a nation-wide epidemiological study, the results of which have demonstrated the safety and effectiveness of the vaccine as an immunizing agent. In addition, the whole program offered an outstanding example of co-operation between federal, provincial and local health authorities and served to bring home to the people of Canada in dramatic fashion the value of public health activities generally.

In co-operation with the health authorities in the ten provinces, the epidemiology division of the Department of National Health and Welfare has undertaken a careful survey of polio in Canada last year, particularly among the age groups five to ten where the use of the vaccine was largely concentrated. As early as last May, a meeting was called in Ottawa with the provincial directors of communicable disease control and a uniform system for reporting polio and assessing the vaccine's effectiveness was devised. For the purpose of this study, polio was classified as "paralytic" in all cases where there was evidence of some muscle weakness extending over a period of more than 24 hours.

With regard to safety, among all the children in Canada who received one or more injections of the vaccine, not one case of

poliomyelitis occurred within 30 days of its administration. This is the interval during which polio, if caused by the vaccine, might be expected to develop. In further confirmation of the safety factor, within the study group described below, only five cases of paralytic polio were reported in nearly 600,000 vaccinated children. In each of these cases, symptoms of polio first occurred at least two months following the inoculations, clearly indicating that the vaccine could not have been responsible for the infection. In other words, these five children contracted polio in spite of, and not because of, the vaccine.

As to the effectiveness of the vaccine, a careful epidemiological study was carried out during a predetermined period of observation-July 1 to November 30 inclusive. The study involved nearly 1,500,000 children in the age groups five to ten, including about 600,000 who received two or more inoculations prior to July 1, and slightly less than 900,000 in comparable age groups who did not receive the vaccine. Among those not included in this study are the substantial numbers of children under the age of five who received the vaccine. Other vaccinated children were excluded for a variety of reasons, for example, those who received only one injection, children vaccinated since July 1, and those living in isolated areas where it is difficult to gather complete epidemiological data.

The following table indicates the result of the evaluation carried out among the study group, province by province: