



ANTI-POLIO SHOTS—Millions of children all over the world will be vaccinated with the Salk polio vaccine, like this Venezuelan youth at Caracas, if final evaluation, due April 12, indicates it is effective against polio.

MEDICINE

Who Got Polio Vaccine?

Names of children who got real polio vaccine instead of dummy "shots" in trials last year to be in mails to health officers as results are announced.

► PARENTS SHOULD know by April 15 at the latest whether or not their children got the Salk polio vaccine in last summer's trials. They will learn this from their local health officers.

Some parents, of course, already know. Their children were the ones in communities where only vaccine was given.

In other communities some of the children who lined up for "shots" got a dummy, or placebo, fluid in the "shot," while others got the real vaccine. The code showing which was placebo and which vaccine in each case is being broken by Dr. Thomas Francis of the University of Michigan Polio Vaccine Evaluation Center at Ann Arbor, Mich.

Knowing how anxious parents are to learn whether their child was vaccinated, Dr. Francis has taken time as he broke the code, to prepare lists of names of children who got the vaccine, officials of the National Foundation for Infantile Paralysis who sponsored the trials told SCIENCE SERVICE.

No one but Dr. Francis knows yet the results of the vaccinations. He will report that at Ann Arbor on April 12. At the same

time that he gives this report to an audience of scientists, the lists of names of children who got the vaccine last summer will be put into the mails.

The lists are being sent to the health officers who in turn will notify the parents of the children. Some health officers might telephone the news, others might send it by mail, still others might arrange to give out the information at the health department offices. Local newspapers will doubtless also publish the list.

Depending, presumably, on how close the children live to Ann Arbor, and local arrangements by the health officer, some children and their parents could know on April 13 whether they got the real vaccine last spring. For those at a distance, it might be a day or two later before the information is available through official channels.

Of all vaccines, including probably the Salk polio vaccine now being evaluated at the University of Michigan, the yellow fever vaccine comes closest to being 100% efficient.

Yellow fever, like polio, is caused by a virus. But the yellow fever vaccine, unlike

the Salk polio vaccine, is made from live virus. The Salk polio vaccine is made from killed virus.

The yellow fever vaccine must be freshly prepared and the persons giving it must be licensed to do so. The person successfully vaccinated actually gets a very modified form of the disease. With this, as with smallpox vaccine, doctors can tell whether there was a "take" by the person's reaction, such as fever in the case of the yellow fever vaccine.

Smallpox is also a virus disease, like polio. But to vaccinate against it, the virus of the related cowpox is used. When there is a "take," indicating a successful vaccination, the person has gotten a very modified form of cowpox. Some scientists have hoped a similar kind of vaccine might be developed against polio.

100% Not Expected

Many people are confident the Salk vaccine will be shown to be effective. But probably no scientist, including Dr. Salk, expects 100% efficiency.

Some people cannot be successfully vaccinated. Their bodies are not capable of producing antibodies to disease germs, even when stimulated to do so by vaccines. If some of the Salk-vaccinated children came down with paralytic polio, it may have been for this reason, rather than because of any failure of the vaccine. This is one of the problems that Dr. Francis and his group presumably will consider in evaluating their study.

Efficient vaccines against typhoid fever, Rocky Mountain spotted fever and typhus fever have been made and are in use. These are made from killed germs of the diseases.

One of the earliest disease-preventing immunizations given children is that for diphtheria. The vaccine for this is made by detoxifying the toxin, or poison, produced by the diphtheria germs. The Schick test, familiar to many school children, tells whether or not "shots" to protect against diphtheria have been effective.

Fight Not Over

Even if the Salk polio vaccine proves highly efficient, eradication of polio may take a long time.

Some authorities think if the present vaccine is effective, polio will be a disease of the past in a year or so. Others say that to eradicate polio that quickly, it would be necessary to vaccinate at least 70% of the population all at once, or 90% of the population under 25 years old.

"Shots" to protect children against diphtheria are fairly routine now. But it has taken a quarter of a century for scientists to develop the immunizing toxoid to its present level and to get a large percentage of babies and small children given the "shots." Even so, 200 to 300 cases of diphtheria still occur every year in the United States.

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