IMMUNOLOGY

Polio Conquest in Sight

➤ WITH THE LICENSING of Type III oral polio vaccine by the U.S. Public Health Service (PHS), the only reason for continued polio in this country is public indifference to available preventives.

The PHS has recommended use of the two polio vaccines, Salk killed and Sabin live oral, pointing out that final conquest of polio is in sight.

In releasing the recommendations, Surgeon General Luther L. Terry said the decision on which vaccine to use rests with individual physicians and health officers.

But in the last analysis, it is up to individuals to take advantage of one or the other vaccine. In a democratic country, no one can be compelled to protect himself and his children from crippling and possible death.

The oral vaccine has the advantage of oral administration over the injections that many find troublesome.

The vaccine is produced by some pharmaceutical companies in liquid form that can be diluted in water or placed on a lump of sugar to make the dose pleasant, especially for infants and children.

Later, when the vaccine is distributed

through normal channels—pharmacies, hospitals, clinics and doctors' offices—the vaccine may be made in other forms such as syrups or candies.

The PHS recommended four priority needs for the coming polio season:

- 1. Areas threatened with epidemics should have adequate supplies.
- 2. Infants should be routinely immunized, beginning at six weeks of age.
- 3. Pre-school children who have not been fully immunized should have the required dosage completed.
- 4. Older unimmunized groups, particularly young adults and parents of young children, should be given vaccine.

Organizers of community drives must be assured that adequate supplies are available before such programs are undertaken.

If oral vaccine is used, all three types should be given individually at intervals of about six weeks. Winter or spring months are best for large-scale immunization but in cases of epidemics, immediate mass use of type specific monovalent oral poliovaccine should be started.

• Science News Letter, 81:229 April 14, 1962

PUBLIC HEALTH

Baby Book Successful

➤ "INFANT CARE," the all-time Government best seller, deserves some of the credit for reducing the death rate of infants since books on babies became popular.

The book was published by the U.S. Children's Bureau, which celebrated its 50th anniversary April 9. Authoritative child-care publications were almost nonexistent in 1912 when the Bureau began its studies and education program. In 1915, when statistics were first available, one baby out of ten born alive died in its first year of life.

Today, fewer than three out of 100 babies born alive die in infancy. Poor sanitation and low income, found to be largely responsible for the high death rate when studies were begun in 1914, have given way to higher standards reaching every community.

The Children's Bureau points out that much remains to be done in reducing infant mortality alone. This country has slipped from sixth to tenth place in recorded infant mortality rates for the major nations of the world. The U.S. program includes maternal and child health, crippled children and child welfare services under the Social Security Act.

Before 1920, when more than six out of every 1,000 women died while giving birth to a child, the Bureau made studies of such deaths. Instructions to the mother and better care during and after confinement through maternity programs over the years have reduced the number of maternal deaths 94%.

Crippling conditions, both seen and unseen—the amputees and epileptics, those with congenital heart conditions or cystic fibrosis—are being helped in partnership programs between the states and the Children's Bureau.

The child welfare program of the Bureau encourages states and localities to offer any child and family, regardless of economic status, race, religion or geographic location, special services that will protect the rights of the child and promote healthy family life.

Juvenile delinquency is still a national problem of grave concern. The number of children referred to the courts for delinquent acts (including traffic offenses) went up from 235,000 in 1949 to over 700,000 in 1960. The Bureau is working closely on this problem with the President's Committee on Juvenile Delinquency and Youth Crime. The Bureau is broadening its own activities to include a special Youth Development Unit.

The original law in 1912 directed the Bureau to have special concern for "infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, legislation affecting children in the several states and Territories."

These concerns have been widened to an international scope, partly brought about by the world wars with their harmful effects on children.

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ENTOMOLOGY

South American Insects To Control Weed Growth

➤ SOUTH AMERICAN INSECTS may be transported to the United States to control the growth of alligatorweed, a costly aquatic pest of waterways in southern states.

The most promising insect, U.S. Department of Agriculture scientists reported, is a flea beetle that keeps the weed under control in Argentina. The beetle is not known to feed on any plant other than alligatorweed and its one close relative, not found in this country.

Two other insects, a stem borer and a species of thrips, are the chief suppressors of alligatorweed outside the flea beetle's range in South America. These insects might be valuable as controls where temperatures may be too high for the flea beetle.

Entomologist George B. Vogt, of USDA's



VACCINE PRODUCTION—A 250foot sterile filling line for the production of oral polio vaccine at Lederle Laboratories, Pearl River, N. Y.,
is believed to be the longest in the
world. This process is the last step in
a months-long production and testing cycle.

Agricultural Research Service, found the three insects, along with about 45 other species that feed on the plant, during two trips to South America.

At least two years of work will be needed before any weed-destroying insects can be introduced into the United States, the scientists reported.

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