Willowbrook's War on Disease:

Guns Point at Jekyl-Hyde Disease

By JACK REYCRAFT

2nd of two articles.

German measles — a disease which itself is milder than the common cold — becomes a vicious killer and a crippler sometimes, when it is caught by an expectant mother.

Eighty per cent of the women who get the disease in the first three months of pregnancy, and their babies, escape all effects of the illness.

But others may lose the child or have a baby with a congenital malformation — blindness, deafness, heart disease or brain damage.

This usually mild-mannered maimer of unborn children is a prime target of the research team which has already eliminated regular measles as a disease at Willowbrook State School, the huge institution for mentally deficient.

Only a little over a year ago, the virus of the disease was grown in tissue cultures at two laboratories — in the Army's Walter Reed Institute and at the Harvard School of Public Health.

Soon a vaccine may be ready to end the threat. One of its first tests will be at Willowbrook, in carefully controlled experiments conducted by Dr. Saul Krugman, professor and chairman of the NYU Medical School's department of pediatrics, and Islander Dr. Joan P. Giles, research associate professor of pediatrics at NYU, who puts in full time at Willowbrook, working in close collaboration with Dr. Harold Berman, director of the Island institution.

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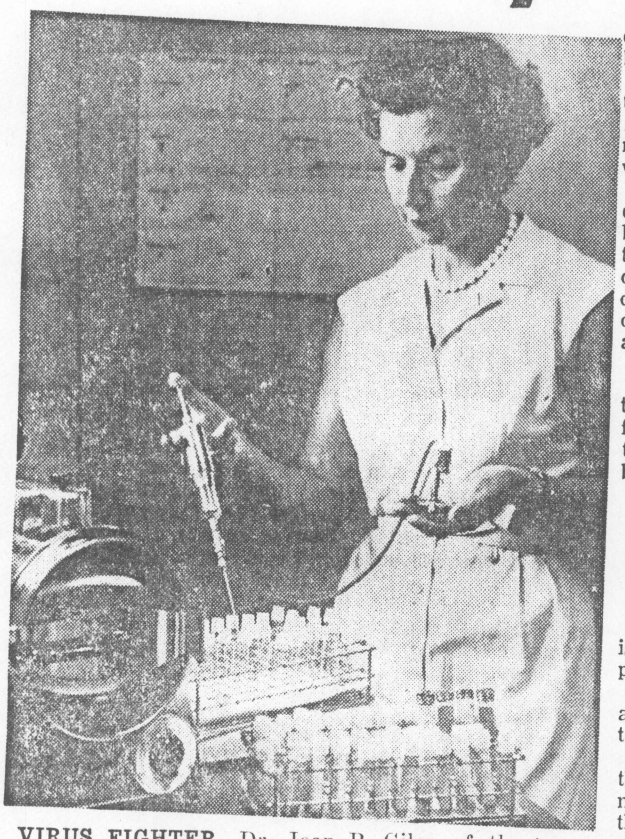
THE STUDY is being conducted in collaboration with Dr. George S. Mirick, scientific director of the Health Research Council of the City of New York, which supports the project, and professor of medicine at NYU; Dr. Robert Green, associate professor of medicine in the same medical school, and Dr. Michael Balsamo, who is in charge of the medical school's laboratories.



VIRUS FIGHTER—Dr. Joan P. Giles, of the team doing pioneer research work on infectious diseases at Willowbrook State School, shows the technique used in setting up media for throat swabs and isolation of virus.

● Every effort is being made to develop a vaccine which, when available, will make it possible to follow the same plan which has made Willowbrook an "island of immunity" from regular measles.

● Tests are being made to determine the effectiveness of gamma globulin, the only treatment now in use to protect pregnant women against the disease.

● The "natural history" of the disease is being studied. It has been learned, for instance, that the virus is present in the throat of a patient as long as seven days before the three-day rash occurs, and as long as seven days after the rash fades.

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ALREADY, Dr. Krugman says, tests now being performed identify the disease definitely—something that wasn't easy for doctors before.

These tests are being perfected, he explains, and may make it possible for a woman to learn when she is married whether she has immunity to German measles.

But, he says, the test material is not available to the general public yet.

Public health authorities have advised parents to expose girls to German measles in childhood.

The studies have also shown that not everyone who gets German measles gets a rash. In fact, the first proved report of the disease without rash was made at Willowbrook this year.

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ONE OTHER field of research at Willowbrook is the effort to defeat infectious hepatitis — the disease which before World War II was known as jaundice. It wasn't until the war that its cause was discovered.

"It is contracted from contaminated food or contacts," Dr. Berman says.

In children, hepatitis is a very mild disease, but in adults it is very serious. It can make a grown up very ill, and recovery may take two to three months.

Hepatitis was a problem at Willowbrook because of the nature of the institution's charges. And until recently it has been a threat to the nurses and attendants who care for the children there.

But the researchers have tamed the virus with gamma globulin. And the Willowbrook methods are used worldwide, especially by the U. S. Peace Corps, which discovered that many of its members contracted the disease after being assigned to foreign lands.

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THE RESEARCH team, subsidized by the Armed Forces Epidemiological Board, has discovered that a large dose of gamma globulin protects an adult against hepatitis for five months, and that another injection gives five more months' protection.

If the worker does get the disease, the gamma globulin attenuates (weakens) the virus, and the illness is a mild one, in some cases so mild the employe doesn't even know he has had it.

Two years ago, 19 employes contracted hepatitis. In the last two months, none has got it.

The gamma globulin protection is optional, at the employe's own choice, Dr. Krugman says.

Whereas only a generation ago little or nothing was known about infectious hepatitis, today the Willowbrook scientists have learned that the type there has a 39-day incubation period. Other types vary from 15 to 50 days.

The research goes on. And the patients at Willowbrook, there because of mental deficiency, make their contribution nevertheless to a better world.