# FIGHT 1956 POLIO EPIDEMICS NOW

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Almost all of us are infected by the polio virus at one time or another. Generally, we don't even know we have the infection. We may fell perfectly well, or we may have a sore throat or an upset stomach.

Sometimes, however, the polio virus does serious damage. It attacks the central nervous system, destroying nerve cells and causing paralysis.

If almost everyone is attacked by the virus, there must be an important reason why some people succumb and some do not. There is.

The critical battle in the fight against polio takes place, as it always has, in the bodies of human beings. It is a battle between the polio virus and tiny particles, called antibodies, which can destroy the virus in the blood stream.

When an individual is infected by the polio virus, the virus enters his system and begins to multiply. At the same time, the human system begins to produce defensive antibodies.

A race ensues. If the human antibody factory works speedily enough ,the antibodies destroy the polio virus in the blood and keep it from attacking nerve cells.

If the virus multiplies faster than antibodies can be produced to fight it, the virus overwhelms the body's defenses, attacks the nervous system and may cause paralysis.

For nearly all of recorded history men knew no way to influence the critical battle of polio within the human body. Then, in 1951 and 1952, research supported by the March of Dimes revealed that antibodies from other people's blood—contained in gammo globulin—could be "loaned" to an individual by injection and would give some protection against paralytic polio.

But the loaned antibodies would last only a few weeks. And to be effective, they had to be injected before or at most within a few days after a person was exposed to polio, and it is not generally possible to tell when this is.

Obviously, gamma globulin, while of value in epidemic situations, was no final answer to the control of polio. Among other things, they could never be enough to go around (since it comes from human blood and it is extremely expensive).

Now—for the first time—we have an effective means for controlling polio. The Salk vaccine, in the most extensive and careful field trial ever given a vaccine, was shown to be 60 to 90 per cent effective in preventing paralytic polio. The vaccine now being manufactured is even more effective.

In most parts of the country we are now at the tapering-off part of the 1955 polio season. We have the fall and winter months and the early spring to prepare for 1956. There is no doubt that we have it in our power greatly to reduce polio incidence next year. How well we succeed will depend largely on how many children receive vaccine.

First, of course, the vaccine must be manufactured and distributed. During the fall and winter large supplies will be made available for use.

It is too much to hope that all of the 165,000,000 people in the United States can be vaccinated before next summer. but many millions of children will surely be inoculated, including almost all in the highly susceptible five-through-nine-year age group.

Since polio attacks more children than adults, it is by vaccinating children that the greatest effect can be achieved, in terms of preventing cases of paralytic polio.

Every parent naturally has questions about the vaccine. Foremost is the question: Is the vaccine safe? The answer to this is yes. Last spring, according to a U. S. Public Health Service report, live virus was found in a small amount of vaccine that had been released. More stringent government safety standards were promptly established to prevent a recurrence of this incident.

The difficulties of a single manufacturer do not, of course, reflect on the safety of all commercially produced vaccine, any more than the existence of one contaminated source of water suggests that water itself is unsafe.

During the summer there have been suggestions that a single shot of the vaccine might give some protection against paralytic polio, and so parents may wonder if such an injection is not enough. The answer is that it is not enough for full and lasting protection.

Here is what happens when a child is given vaccine. Some seven to 10 days after the first shot he begins to develop polio-fighting antibodies. These help strengthen his defenses against paralytic polio. When he receives his second shot, the number of antibodies again rises. Then, approximately seven months later, when he receives his third shot, there is a further rise in antibodies, and he then has the full protection of the vaccine.

Thus, the child with one shot has some help in defending himself against paralytic polio. The child with two has even more help. The child with three, properly spaced, has the full protection of the vaccine.

The body tries to defend itself against paralytic polio even without vaccine. What the vaccine does is bolster natural defenses.

Everyone would like to know how long the effect of vaccine lasts. And no one can give a hard and fast answer, because we have not had the vaccine very long. A number of children who have received it will be followed through the years until we do know how long it protects.

However, because the level of protection after the third shot is so high, there is reason to hope that it will last for many years.

The third shot is in a sense the real key to the effectiveness of the vaccine. This is why we will look with growing interest toward the 1956 polio season. By that time enough youngsters should have received their complete series of injections to make a substantial difference in the nationwide polio rate. Then we will be able to look forward to final control of polio within a few years.

This fall the vaccine program of the National Foundation for Infantile Paralysis will be concluded in school clinics in all states. In these clinics youngsters from the first and second grades will receive their second shots of vaccine, and so will third and fourth graders in schools that participated in the 1954 field trials. No first shots will be given.

The United States Congress has appropriated $30,000,000 for the purchase of polio vaccine during the coming few months. Supplies of vaccine are allocated to states on the basis of the number of unvaccinated children five through nine years of age. Each state is responsible for the distribution of the vaccine within its borders. Your local health officer or personal physicial will be able to tell you what arrangements have been made in your state.

The battle against polio in the summer of 1956, so far as prevention is concerned, will be won or lost this fall and winter. Success will depend on how many children are vaccinated. If we vaccinate every youngster for whom we have vaccine, next year should begin to show a significant decrease in the number of paralyzed children.

# Shiny Boots: New Lustre For An Old Military Tradition

Fort Benning, Ga.—Old soldiers never die—they just talk each other out of existence about the best way to bring up the shine on a pair of Army shoes.

Not in the Third Infantry Division, however. The recent "Shiny Boots" contest settled that argument. For a day or so, at least.

Nylon and clear water is the formula that gave the "extra something" to the mirror-like surfaces of the three pairs of Army boots that won top honors for their owners in the contest.

Each winner, of course, has his own individual way of working out the formula.

The top man, Sergeant First Class Ted R. Thomas of (710 Race Street) New Orleans, La., received for his variation a plaque mounted with a pair of miniature boots and the patch of the "Rock of the Marne" division.

This is how Thomas does it: He holds the boot to be polished under cold running water. Hot water, he explains, would melt off the old polish. While the boot is dripping, he rubs the polish in with his fingertips, using a circular motion. Then out comes "Old Betsy", his polishing cloth—pieces of old nylon parachute doubled and stitched together to avoid the possibility of his using the wrong side of the fabric. The wrong side, he explains, is too fuzzy.

Thirty minutes of polishing, more or less, and the sergeant figures his boots ready for inspection.

Corporal Andrew Wyatt of (Rt. No. 3) Bessemer, Ala., second prize winner, uses nylon and clear water, but he dips his nylon cloth into the water before dipping it into the polish. No bare fingertips for him! He brings the polish up with an ancient T-shirt, kept clean and ready for the occasion.

## Farm Exports Up 20% Over Same '54 Period

U. S. farm exports from July through September of this year were 20 per cent greater than those during the same period a year ago, the Agriculture Department has announced.

Exports this year were valued at more than $720 million compared with $598 million in the similar 1954 period.