

croft's filariasis. Similar measures can be found to reduce the breeding of other blood-sucking insects and thus lessen the incidence of leishmaniasis, onchocercosis and Chagas' disease. Where insects themselves cannot be eliminated, ways can and must be found to protect human beings from their bites. Endemic foci of the snail *Australorbis glabratus* can be discovered and the snails killed with copper sulphate or copper carbonate, thus eliminating exposure to schistosomiasis.

The needs for carrying out the program which has been all too briefly outlined, require a radical change from the primary emphasis on treatment of individual patients to an attack on each disease as an epidemiologic entity. By eliminating the supply of etiologic agents the disease will be controlled at its source and many hundreds of thousands of human beings will be saved yearly from disease. This means that many more physicians, nurses and technical assistants must be trained as full-time workers in preventive medicine in the American Tropics.

We of the present generation have the challenge frankly presented to us. The opportunity is tremendous. Are we willing, do we have the courage, do we have the vision to solve these problems as Finlay, Reed, Chagas and Gorgas did those problems which confronted them?

POLIOMYELITIS IN CUBA

During the year 1941 there were only 10 cases of poliomyelitis in Cuba. In 1942, provinces, cases, January, Habana 1; Oriente 1; February, Oriente 1; March, Habana 2; Villas 1; April, Habana 1; Villas 1; Oriente 1.

In May 12 cases were reported in Oriente and 23 in the other provinces, Camagüey remaining non-infected. In June and July cases in Habana had risen to 248 cases and in Oriente Province to 127. In July the disease reached Camagüey (10 cases).

In August and September, there was a decrease in Oriente, and an increase in Habana. At the present time (Oct. 10) poliomyelitis has spread all over the national territory (429 cases), Matanzas being the most affected province, with a disease rate of 12.22 per 100,000; Oriente comes next, 11.69; and Villas is the least affected, 3.84.

The highest death rate in the provinces, occurred in Oriente, 16.56%, and the lowest in Villas, where no deaths were reported among 37 cases.

Comparing this year's epidemic with that of 1934, it is seen that the disease so far has had a greater spread, but that the mortality has been lower; 5.5% against 18.82% in 1934.

It has not been possible to determine either the relation between one case to another, or the course of the disease from zone to zone and province to province. Just as in 1909 and 1934, no reports have been received of more than one case of poliomyelitis in one family.

Since January to November 17, 1942, the cases officially reported are 486, the deaths 43.

PAN AMERICAN YELLOW FEVER, 1938, 1942

Today there is no need to justify viscerotomy, protection tests and vaccination in jungle districts, all of which have proved their worth in recent years. It is necessary, however, to emphasize the advantages of permanent anti-aegypti measures throughout the Americas; not the measures developed by Gorgas and Oswaldo Cruz to eliminate yellow fever from places under constant control, but modern anti-aegypti measures designed for species eradication which have proved their value now for a full decade. The initial costs will be high but the program

of eradication of *aegypti* from the Americas is entirely feasible and will pay enormous dividends in the future on the capital expended. Since species eradication is not easy and requires adequate authority and meticulous administration, the eradication of *Aedes aegypti* on a continent-wide basis could be successfully and rapidly executed by simultaneous measures under a general international agreement providing for a uniform orientation and the training of working units in countries where eradication has been accomplished.

Our recommendation for the future is but a repetition and a slight amplification of those of 1938 when we said:

"We believe that a reasonable program for the whole continent can be based on three measures: antilarval campaign; viscerotomy and vaccination.

- (1) The antilarval campaigns should be organized on a permanent basis in the principal ports and cities where *Aedes aegypti* abounds, and especially in those regions where suitable conditions exist for maintenance of jungle yellow fever."

Today we recommend that the campaign against *aegypti* be organized at all points where this mosquito exists for the purpose of eradication of the species from this continent.

- "(2) Viscerotomy should be organized in all the jungle regions of countries where yellow fever has been endemic in order to ascertain where vaccinations should be applied. Viscerotomy might also be employed in cities with a high *aegypti* density and in those where antilarval campaigns cannot be carried out."

With the organization of antilarval work as recommended above there will be no need for urban viscerotomy.

- "(3) Large scale vaccination should be employed to protect populations exposed to jungle yellow fever, to protect urban settlements where antilarval work cannot be carried out, and for the immunization of the crew and passengers of airships."

With a program of *aegypti* eradication there should be no need for general urban vaccination.

There are those who will oppose the continent-wide campaign of *aegypti* eradication on the basis of its high cost and the greater immediate returns supposedly gotten by using the same amount of money on other health problems. Such critics should consult the history of anti-mosquito measures in Brazil and especially here in the fair capital of Rio de Janeiro. After the victorious campaign of Oswaldo Cruz, 1903 to 1908, all of south Brazil was practically free of yellow fever for two decades and the expensive anti-mosquito measures were allowed to lapse in favor of more urgent health problems. With the appearance of yellow fever in 1928, Fragas had to face a struggle of fifteen months building up a staff of ten thousand men before the disease was once more under control. During a period of two years and a half, over ten million dollars were spent which is more than enough to finance the eradication program for the next ten years in all Brazil, if such a long period be necessary. Brazil will not again tolerate neglect of anti-*aegypti* measures and is confidently undertaking its eradication.