

directing council



PAN AMERICAN
HEALTH
ORGANIZATION
XI Meeting

regional committee

WORLD
HEALTH
ORGANIZATION
XI Meeting



Washington, D. C.
September 1959

CD11/28, Rev. 1 (Eng.)
30 September 1959
ORIGINAL: SPANISH

Topic 33: STATUS OF AEDES AEGYPTI ERADICATION IN THE AMERICAS

By resolution of the I Meeting of the Directing Council (Buenos Aires, September 1947), the Pan American Sanitary Bureau was entrusted with the promotion and coordination of the A. aegypti eradication campaign in the Americas. Since that time, information on the progress achieved by the campaign has been disseminated through the monthly Boletín of the PASB and through reports presented at various times.

In a complete report presented at the XV Pan American Sanitary Conference (Puerto Rico, 1958), emphasis was given to the success in A. aegypti eradication in eight countries and three territories. The report realistically defined the factors that have prevented greater advance in the campaign, and appropriate measures were suggested for carrying the campaign to successful completion by the time the next Conference meets in 1962.

The present report describes what has been achieved in the lapse of one year, setting forth the major developments and the possibilities of attaining the objective within the target time. With this in view, a study of the status of the campaign in each country is given below, together with a table showing the results in figures and a map giving an over-all picture of what has been achieved and what still must be done to complete the campaign.

The report does not include reference to Bolivia, Brazil, Ecuador, Nicaragua, Panama, Paraguay, Peru, Uruguay, British Honduras, French Guiana, and Panama Canal Zone, which were declared free of A. aegypti at the XV Pan American Sanitary Conference and are now under a surveillance system.

Argentina. The campaign that has been under way since 1955 with the cooperation of PASB should by now have reached its final stage. A number of difficulties have delayed the progress of the work and only one third of the program has been completed as of the present time. Of the 2,384 localities inspected, 148 were found infested and, of these, 142 are already free of the mosquito. The majority of these localities

are located in the northern and northeastern areas, which are considered the most highly infested in the country and which border on Brazil and Paraguay. Little work was done in the central and southeastern areas. The Capital, located in the southeastern region, was partially inspected and found negative; however, A. aegypti were found in two nearby localities within the Greater Buenos Aires area. It is expected that the campaign in Argentina will be intensified during the present year.

Chile. A small infested area was discovered in May 1958. The final activities are scheduled to start this year, with the collaboration of PASB. It is probable that during the coming year this country may be declared free of A. aegypti.

Colombia. The latest checks made are confirming eradication. Cúcuta, located near the border with Venezuela, the only place found in Colombia with A. aegypti resistance to DDT, is now negative as the result of perifocal application of dieldrin. Of the 3,549 localities inspected, 354 were found with A. aegypti; of these, 353 are already negative. The necessary checks to determine eradication throughout the country are scheduled to be completed at the end of this year.

Costa Rica. The campaign in this country has been in the final stage since 1952. Its completion depends on the final check, which it is expected to start this year.

Cuba. The new Government is giving full support to the campaign, which now has resources such as were never before obtained in any other country. If present conditions continue, it is expected that eradication may be achieved within three or four years.

Dominican Republic. Because of shortage of personnel, the anti-aegypti activities will be limited to certain towns in the interior. The spraying with dieldrin against malaria has covered all the rural areas, and it is hoped that the A. aegypti has been eliminated as a result. The work in the Capital has been suspended since the existence of DDT resistance was confirmed. The campaign will be intensified in the near future, dieldrin being used in areas where there is resistance to DDT.

El Salvador. The final verification, with PASB assistance, should be completed before the end of this year. As of the present time, the results have been negative in all the localities inspected.

Guatemala. The final verification, with PASB assistance, was completed in November of last year with all the results negative. This country can be declared free of A. aegypti.

Haiti. For economic reasons this country was forced to suspend the anti-aegypti activities in the latter part of 1958, although some areas were highly infested and resistance to DDT is present in the Capital. It is expected that the campaign will be resumed within a short time.

Honduras. With the completion of final verification and the inspection of areas where there is little possibility for A. aegypti to exist, it will be possible to declare this country free of the vector in the present year.

Mexico. Sprayings with DDT and dieldrin against malaria in recent years should have changed the Stegomyia situation that was present in August 1955, when the campaign was suspended. It is planned to evaluate the results of those activities, so that a decision can be reached as to what is still required to achieve A. aegypti eradication.

United States. In 1958, 25 airports were inspected in the cities of Florida, including Fort Pierce, Jacksonville, Miami, Pensacola, St. Petersburg, Tampa, and West Palm Beach; 6 were found positive with indices of about 4 per cent. Also, 10 docks in Florida ports were found to have a 9 per cent index. One dock on the coast of North Carolina also was infested. The island of Key West, Florida, considered to be negative since 1948, was found to be positive in 1958. In inspections made previously, many cities were found to be positive in the States of Florida, South Carolina, Georgia, Alabama, Mississippi, Louisiana, Texas, Arizona, North Carolina, Tennessee, Arkansas, Oklahoma, Virginia, Kentucky, Missouri, and Kansas.

Activities are being carried out by the United States Public Health Service, through the Communicable Disease Center and the Division of Foreign Quarantine, in order to learn more about the problem.

Venezuela. In its present stage, which for all practical purposes was started this year with PASB collaboration, the campaign is being directed toward verification of the conditions in the Capital, which has been treated several times with residual-action insecticides; also, it is the intention to take immediate steps to establish protective measures along the Colombian border, in view of the resistance to DDT already found in almost the entire State of Táchira. Thereafter, the activities will be extended to all the western part of the country, where there are large cities, such as Carora, Coro, Valencia, Puerto Cabello, Maracaibo, and Trujillo, which are expected to be found negative, owing to work done previously. The last stage of the campaign will be developed in the eastern region within two years. In areas where DDT resistance has been or might be found, dieldrin will be used. With the available resources and the interest now shown in the work, it can be expected that A. aegypti eradication will be achieved in Venezuela within the next three years.

Guianas. In British Guiana the 93 previously infested localities continue to be considered negative. It is necessary to make the final verification with PASB assistance.

In Surinam no effective activities have as yet been carried out to eradicate A. aegypti. It is known that the indices are high and infestation is widespread. DDT resistance has already been observed in some urban areas, also in areas near the French Guiana border, which was reinfested this year with mosquitoes coming from Surinam. Measures are being taken to organize the campaign in this territory and to combat the reinfestation in French Guiana.

Caribbean Area. The islands in this area can be subdivided into three groups covered by 20 A. aegypti eradication programs:

1. Islands showing negative results that can soon be declared free:

Aruba, Bermuda, Bonaire, Antigua and Barbuda, Grenada, Montserrat, Saint Vincent, Saint Lucia, Saint Kitts, Nevis, and Trinidad.

2. Islands with programs under way:

Anguilla, Bahamas, Barbados, Curaçao, Grenadines, Jamaica, Saint-Martin, Saint Eustatius, Saba, and Tobago.

3. Islands with little activity and that require better organization:

Dominica, Guadeloupe, Martinique, Puerto Rico, and the Virgin Islands.

The campaign in the Lesser Antilles presents serious obstacles because of their geographic dispersion and various administrative problems in the majority of the islands.

As is known, in the Caribbean area A. aegypti has been showing DDT resistance in certain areas of Trinidad, Puerto Rico, Jamaica, Haiti, and Dominican Republic. Resistance has also been observed in one locality in Colombia and in some areas of Venezuela and Surinam near the shores of the Caribbean. To cope with the problem, it is recommended that dieldrin be used instead of DDT, as it has proved most effective in eliminating A. aegypti. Dieldrin has been used in house sprayings and in perifocal treatment, with the limitations and the precautions required for technical reasons.

Another measure that has been insistently recommended to the countries that have already achieved A. aegypti eradication, is that of surveillance over ports of entry to prevent or detect any possibility of reinfestation. Special instructions on quarterly reports on surveillance have been sent to those countries.

This report shows an evident progress over last year in the A. aegypti eradication campaign in the Americas: the eradication activities in Central America have been practically completed; the situation in the Caribbean area has improved; and the campaigns in Venezuela and Cuba have been given a new impetus. In summary, it can be said that the problem persists principally in North America.

Annex

SUMMARY OF THE PROGRESS OF THE AEDES AEGYPTI ERADICATION CAMPAIGN IN THE AMERICAS
THROUGH JUNE 1959 OR LAST REPORTED MONTH

Country	Date		Area presumed initially infested (Km ²)		Localities inspected					Pre- sent stage or status		
	Start- ed	Latest report	Total	In- spect- ed (%)	Number	Initially Positive			Still posi- tive			
						Total	Treated	Verified Number				
Argentina	IV.48	V.59	1,500,000	26.9	2,384	148	145	142	1	A		
Bolivia	VI.32	XII.56	100,000	100.0	282	65	65	65	0	E		
Brazil	I.31	VIII.58	5,358,822	100.0	270,588	36,119	36,119	36,119	0	E		
Chile	VI.45	V.58	50,000	100.0	81	44	44	44	1	A		
Colombia	XI.50	VI.59	280,000	95.4	3,549	354	353	353	1	A		
Costa Rica	IV.49	VI.59	20,000	100.0	1,238	104	104	104	0	N		
Cuba	III.54	V.59	100,000	0.3	26	26	26	24	18	A		
Dominican Republic	X.52	IV.59	42,020	80.4	1,337	341	341	278	38	A		
Ecuador	VI.46	VI.59	69,454	100.0	2,824	337	337	337	0	E		
El Salvador	IV.49	VI.59	18,675	100.0	989	190	190	190	0	N		
Guatemala	I.49	IX.58	36,423	100.0	2,485	138	138	138	0	N		
Haiti	X.53	IX.58	27,750	49.4	2,379	605	602	435	27	I		
Honduras	IX.49	VI.59	64,929	100.0	600	53	53	53	0	N		
Mexico	I.51	VII.55	1,000,000	10.0	924	482	482	418	159	I		
Nicaragua	I.50	III.59	65,263	100.0	3,126	18	18	18	0	E		
Panama	II.49	VI.59	56,246	100.0	2,853	44	44	44	0	E		
Paraguay	I.48	IX.58	200,000	100.0	1,561	98	98	98	0	E		
Peru	I.40	IX.58	638,000	100.0	4,320	191	191	191	0	E		
United States	-	-	777,000	-	-	-	-	-	-	P		
Uruguay	X.48	X.58	187,000	100.0	1,020	133	133	133	0	E		
Venezuela	VI.48	V.59	600,000	85.0	3,460	393	393	377	43	A		
France	French Guiana		V.49	III.58	91,000	100.0	222	55	55	55	0	E
	Guadeloupe		I.57	VI.59	1,619	1.7	52	37	35	30	12	A
	Martinique		XI.53	III.58	1,813	100.0	34	34	34	34	27	I
Nether-	Aruba		III.52	VI.59	179	100.0	9	9	9	9	0	N
lands	Bonaire		IX.52	VI.59	246	100.0	6	6	6	6	0	N
	Curaçao		X.51	VI.59	448	100.0	155	155	155	155	17	A
	Saba, St. Martin and St. Eustatius		VIII.58	VI.59	60	100.0	34	30	30	30	6	A
	Surinam		-	-	143,000	-	-	-	-	-	-	P
United	Antigua		VIII.54	VI.59	280	100.0	50	47	47	47	0	N
Kingdom	Bahamas		VI.54	VI.59	11,396	1.3	13	11	11	11	2	A
	Barbados		III.54	VI.59	171	100.0	95	95	95	95	12	A
	Bermuda		I.51	XII.51	53	100.0	9	9	9	9	0	N
	British Guiana		III.46	III.59	4,662	100.0	93	93	93	93	0	N
	British Honduras		X.50	VI.59	22,965	100.0	84	2	2	2	0	E
	Dominica		II.51	X.56	789	90.0	136	66	66	66	16	I
	Grenada		XI.52	VI.59	311	100.0	8	8	8	8	0	N
	Grenadines		XI.52	VI.59	65	100.0	7	5	5	5	1	A
	Jamaica		II.50	II.59	11,424	77.3	64	42	42	28	12	A
	Montserrat		V.56	VI.59	83	100.0	33	16	16	16	0	N
	St. Kitts-Nevis-Anguilla		V.50	III.59	396	100.0	62	33	33	33	18	A
	Saint Lucia		V.53	VI.59	259	100.0	50	50	50	50	0	N
	Saint Vincent		III.53	III.59	332	100.0	8	8	8	8	0	N
	Trinidad and Tobago		I.51	VI.59	3,108	100.0	128	122	122	122	3	A
	Virgin Islands		-	-	174	-	-	-	-	-	-	P
United	Canal Zone		...	IX.57	1,432	100.0	21	21	21	21	0	E
States	Puerto Rico		V.50	V.59	8,897	61.8	481	248	248	248	114	A
	Virgin Islands		-	-	124	-	-	-	-	-	-	P

Symbols: P = Preparatory; A = Active; N = Negative; E = Eradicated; I = Interrupted;

... = No data available.

STATUS OF AÈDES AEGYPTI ERADICATION CAMPAIGN - 30 JUNE 1959

