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THE 1976 SKIN TEST SURVEY for SCHISTOSOMIASIS IN PUERTO RICO

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A B S T R A C T

Periodic evaluations of the geographic distribution of Schistosoma mansoni infections have been made in Puerto Rico in 1963, 1969, and recently in 1976, using adult worm antigen for skin testing of children in a randomized sample of fifth graders. For the survey of 1976 reported herein, the island wide rate of positive reactors was 6%, half of what it had been in 1969. In addition to the overall drop in reactor rates there was a marked geographic shift of the area of highest rates to northeastern Puerto Rico, just east of San Juan on the coastal plain between Carolina and Luquillo. Also a new focus of transmission was discovered in the Castañer-Yauco area.

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For their assistance in completing this study, the authors are indebted to Mr. Sergio Vélez and his personnel in the Bilharzia Control Unit of the Department of Health; to the nurses who assisted in the injection program: Mrs. Rosa E. Dávila, Mrs. María Rosario Cora, Mrs. Laura E. Díaz de Cruz, Mrs. María P. Camuñas Ortíz, Mrs. María Luisa Rivera de Fuentes, and Mrs. María H. Walker de Ocasio; to Mrs. Nydia Loyola of the Department of Education; to Ms. Lydia Urbina, Ms. María de Lourdes Fuentes, Mr. Pedro Sotelo, Mr. Felix Liard and Dr. William R. Jobin of the Center for Energy and Environment Research; to Dr. Z. R. Sotomayor of the University Hospital; to Dr. Jesse C. Arnold of Virginia Polytechnic Institute; to Mr. Ernesto Ruíz, Mrs. Wilda Knight and Dr. Robert Hiatt of the U. S. P. H. S. Communicable Disease Center in San Juan; and to Dr. George V. Hillyer of the University of Puerto Rico.

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INTRODUCTION

The parasitic disease schistosomiasis (bilharzia) has been under attack by health authorities in Puerto Rico since 1953 and periodic assessments have been made of the infection, including an island-wide survey of 1976, reported herein. For the first decade of control operations, an evaluation of prevalence in the controlled areas was accomplished by examination of fecal specimens from school-children. However as the control program expanded and the prevalence and intensity of infections decreased, this method yielded little useful information and became very expensive. In 1963 these problems were overcome by the first island-wide survey using adult schistosome antigen, injected intradermally[1]. A second, similar survey was repeated in 1969[2] and finally this third survey was finished in 1976. It was the purpose of these surveys to monitor changes occurring in distribution of the infection, and to define the impact of the operational control program. This report presents the results of the 1976 survey and the changes in comparison with the 1969 results.

Evaluation of the control effort by measuring prevalence with the skin test at 5 to 10 year intervals was much better suited to the operational program than was the more expensive measurement of prevalence, incidence, or intensity of infection by annual fecal examinations[3]. The high cost of annual fecal surveys was justifiable only in the small pilot projects where rapid evaluation of control methods was needed in the early stages of the control program.

MATERIALS AND METHODS

Antigen for the skin test was prepared from adult Schistosoma mansoni and standardized at a nitrogen concentration of 35-40 micrograms per liter, in the same manner as in the previous surveys[1,2]. Two batches of antigen were used, one batch from the antigen prepared for the 1969 survey at the University Hospital of the Puerto Rico School of Medicine, and the second batch prepared at the Puerto Rico Nuclear Center (now the Center for Energy and Environment Research), in 1976. A comparison was made between the two batches by injecting both antigens at slightly separated sites on the volar aspect of the forearms of 381 children. This was done to determine the required adjustment to the size of the reaction wheal from the 1976 batch of antigen so that the adjusted wheal sizes would be equivalent to the wheal sizes from the 1969 antigen.

The geographic sampling system was based on the fifth-grade classrooms in public schools throughout Puerto Rico, identical to the system used in 1963 and 1969[1,2]. About one out of every four classrooms was sampled, testing all children in the classroom. For sampling purposes the classrooms were grouped into 31 watersheds, which were stratified into urban and rural zones and into sub-watershed areas when geographical differences indicated a non-homogeneous valley. The randomized selection of classrooms had been conducted in 1963 and the same classrooms were repeated in 1969 and 1976 to preserve the comparability of the results.

The methods of injecting, recording, and measuring the wheal size of the reaction were identical to the methods used in 1969[2]. No control injections were used and the criteria for positivity were the same as in 1969. For males under 14 years of age and for all females, a wheal area of 1.0 square centimeters or greater indicated a positive reaction. For males age 14 and over, a wheal 1.2 square centimeters or greater in area was considered positive. This was a change from the 1963 criteria for positivity. The change was made after careful statistical analysis of reaction wheal sizes from the 22,548 children tested in 1969, when it was determined that the same reactor rates could be obtained with the new criteria, ignoring the control reaction[4].

The testing teams were trained by one of the authors (HNA) who also monitored their performance and and personally re-tested the children if it appeared that incorrect procedures had been followed. This occurred in the Ponce region when the reaction size was recorded as the area of erythema, instead of the indurated wheal. Seven teams conducted the injections in April and May and also in September of 1976, testing fifth-graders in the first academic year and then re-testing corresponding sixth-graders in the Ponce region in the early part of the second academic year.

RESULTS

In order to make the reaction rates from the 1976 batch of antigen comparable with those from the 1969 batch of antigen, the calibration trial was made on 381 children in May of 1976, using both antigens on each child. The children were from Luquillo, a high prevalence area, and from Ponce, an area with a low prevalence. The 1976 antigen produced larger wheals than did the 1969 antigen. An analysis of the size of the wheals and the ages of the children showed that the tendency to larger wheals from the 1976 antigen was greatest among ten year old children, with a decreasing difference in wheal sizes on the older children (Table 1). Thus adjustments to the wheal sizes from the 1976 antigen were made by age.

It was necessary to reduce the wheal sizes of children who reacted positively to the 1976 antigen by 0.3 square centimeters for 10-year old children and 0.2 square centimeters for children 11 years and older, in order to obtain a reactor rate equivalent to that obtained from the 1969 antigen. Of the possible simple adjustments to wheal size, this one gave the closest approximation to the prevalence obtained with 1969 antigen on the same 381 children (Table 2). This correction was made on the individual data sheet for each child injected with the 1976 antigen who had an uncorrected wheal size of 1.0 square centimeters or greater. Thus after adjustment for antigen batch, the determination of positivity was uniform for all children tested in 1976, and equal to the determination of positivity in 1969.

The estimate of positive reactors to the skin test among fifth-graders was 6% ± 1% for the entire island, calculated from the data on 10,224 children tested in the sample and adjusted for population and varying sample ratios in each watershed[5]. Only two of the 31 watersheds had reactor rates markedly greater than 10% which is herein used as the definition of an endemic watershed (Table 3). These two watersheds (2 and 4) were contiguous in northeastern Puerto Rico and included the municipalities of Luquillo, Río Grande, Trujillo Alto, Carolina and Loiza. Watershed 4 had the highest reactor rate on the island, 21%. The lowest rate was 1%, obtained in watershed 18 near Naranjito (Table 3). If the endemic zone is defined as those watersheds where the mean prevalence of positive reactors was 10% or greater, the population involved was almost half a million people with a mean rate of reactors about 16% (Table 4).

Fourteen watersheds in the central and western portions of the island had a reactor rate less than 5%, indicating virtually no infections (Figure 1). Watersheds 24 and 25 in the Yauco area were a small anomaly of high rates with values of 13% and 10% respectively, compared to surrounding watersheds where the rates were 6% or less. The rates among urban children were not significantly different from those in rural children.

TABLE 1

DISTRIBUTION OF COMPARATIVE REACTION SIZES TO TWO ANTIGEN BATCHES IN 381 CHILDREN FROM LUQUILLO AND PONCE, PUERTO RICO, 1976

WHEAL SIZE IN SQUARE CENTIMETERS	---NUMBER OF POSITIVE REACTORS---- AGE 10	AGE 11	AGE 12 & 13
Less than 1.0	108/86*	131/119	86/73
1.0	5/12	6/7	6/11
1.1	1/6	2/7	3/4
1.2	6/3	2/6	3/6
1.3	1/5	2/3	1/4
1.4	0/2	3/2	1/0
1.5 and greater	5/11	7/9	2/4
Total $\geq$ 1.0	18/39	22/34	16/29
Total Tested	126	153	102
Prevalence	14%/31%	14%/22%	16%/29%

*Results from 1969 batch/results from 1976 batch.

TABLE 2

EFFECT OF ADJUSTMENT OF WHEAL SIZE FOR 1976 ANTIGEN ON RATE OF POSITIVE REACTORS AMONG 381 CHILDREN FROM LUQUILLO AND PONCE, PUERTO RICO, IN COMPARISON WITH PREVALENCE FROM 1969 ANTIGEN

Age In Years	--1969 ANTIGEN---		----------1976 ANTIGEN----------		
	Number	Per Cent	Before Adjustment Number	After Adjustment Number	Per Cent
10	18	14	39	18	14
11	22	14	34	20	13
12 + 13	16	16	29	14	14
TOTAL	56	14.7%	102	52	13.7%

URBAN SCHOOLS		RURAL SCHOOLS		URBAN AND RURAL SCHOOLS COMBINED			
NUMBER TESTED	PREVALENCE RATE	NUMBER TESTED	PREVALENCE RATE	PREVALENCE RATE	STANDARD DEVIATION	WATERSHED NUMBER	MUNICIPALITY
187	6.4%	84	17.5%	10.3%	± 2.2%	1	FAJARDO, CEIBA
104	25.0%	206	11.6%	16.4%	2.9%	2	RIO GRANDE, LUQUILLO
47	19.1%	103	5.8%	10.4%	2.9%	3	NAGUABO
123	21.1%	210	19.5%	20.7%	3.6%	4	TRUJILLO ALTO, CAROLINA, LOIZA
152	12.5%	163	10.4%	11.6%	2.2%	5	GURABO, JUNCOS, LAS PIEDRAS
112	10.7%	170	10.0%	10.1%	2.0%	6	HUMACAO
134	9.1%	143	4.2%	5.7%	1.1%	7	YABUCOA, MAUNABO
189	7.4%	219	6.4%	7.2%	1.0%	8	SAN LORENZO, CAGUAS, AGUAS BUENAS
396	5.0%	139	5.8%	5.2%	0.5%	9	SAN JUAN, RIO PIEDRAS
259	2.3%	140	0.0%	1.7%	0.2%	10	BAYAMON, CATAÑO, GUAYNABO
0	-	127	3.2%	3.2%	1.1%	11	UPPER BAYAMON
178	2.4%	208	6.3%	4.5%	0.8%	12	COMERIO, BARRANQUITAS, CIDRA, CAYEY, AIBONITO
107	1.9%	166	3.0%	2.9%	0.7%	13	ARROYO, PATILLAS
96	6.1%	205	7.3%	6.8%	1.2%	14	GUAYAMA, SALINAS
165	8.5%	224	7.1%	8.2%	1.4%	15	VILLALBA, JUANA DIAZ, COAMO, SANTA ISABEL
53	1.9%	186	3.8%	3.3%	0.8%	16	OROCOVIS
44	6.8%	166	2.0%	2.8%	1.1%	17	CIALES
114	0.9%	187	1.1%	1.0%	0.3%	18	TOA ALTA, NARANJITO
211	1.4%	220	1.6%	1.4%	0.2%	19	DORADO, TOA BAJA, VEGA BAJA, VEGA ALTA, COROZAL, MOROVIS
139	7.2%	165	3.6%	5.2%	1.0%	20	BARCELONETA, MANATI
143	3.5%	129	3.9%	3.7%	0.8%	21	ARECIBO
187	2.8%	281	6.6%	5.1%	1.0%	22	UTUADO, JAYUYA, ADJUNTAS
246	6.1%	215	6.3%	4.9%	0.7%	23	PONCE
216	11.3%	278	13.8%	13.2%	2.4%	24	GUAYANILLA, YAUCO, PEÑUELAS
0	-	98	10.2%	10.2%	3.2%	25	UPPER YAUCO, CASTAÑER
324	3.6%	421	1.2%	2.4%	0.3%	26	AGUADILLA, RINCON, LARES, CAMUY, HATILLO, MOCA, AGUADA, ISABELA, QUEBRADILLAS, SAN SEBASTIAN
133	2.3%	221	0.2%	1.5%	0.4%	27	AÑASCO, LAS MARIAS
191	4.2%	69	0.0%	3.1%	0.8%	28	MAYAGUEZ
180	4.3%	233	3.6%	3.7%	0.6%	29	CABO ROJO, SAN GERMAN, SABANA GRANDE, MARICAO, HORMIGUEROS
121	8.3%	168	2.4%	4.8%	1.1%	30	LAJAS, GUANICA, ENSENADA
28	0.0%	101	9.9%	7.8%	1.6%	31	VIEQUES

TABLE 3. REACTOR RATES TO THE SCHISTOSOMIASIS SKIN TEST BY WATERSHEDS IN PUERTO RICO, 1976

TABLE 4

REMAINING ENDEMIC AREA IN PUERTO RICO

(Watersheds with reactor rates of 10% or above in 1976)

		Number of Classrooms 1976	Reactor Rate 1976	Population 1970
1.	Fajardo, Ceiba	10	10.3%	23,300
2.	Río Grande, Luquillo	26	16.4	32,422
3.	Naguabo	15	10.4	17,996
4.	Trujillo Alto, Carolina, Loiza	70	20.7	177,374
5.	Gurabo, Juncos, Las Piedras	43	11.6	58,215
6.	Humacao	26	10.1	36,023
24.	Guayanilla, Yauco Peñuelas	42	13.2	69,220
25.	Upper Yauco, Castañer	12	10.2	10,000
	TOTAL	202		434,550

Weighted Mean Prevalence = 15.6%

1976 PREVALENCE OF SCHISTOSOMIASIS IN PUERTO RICO FROM SKIN TEST SURVEY

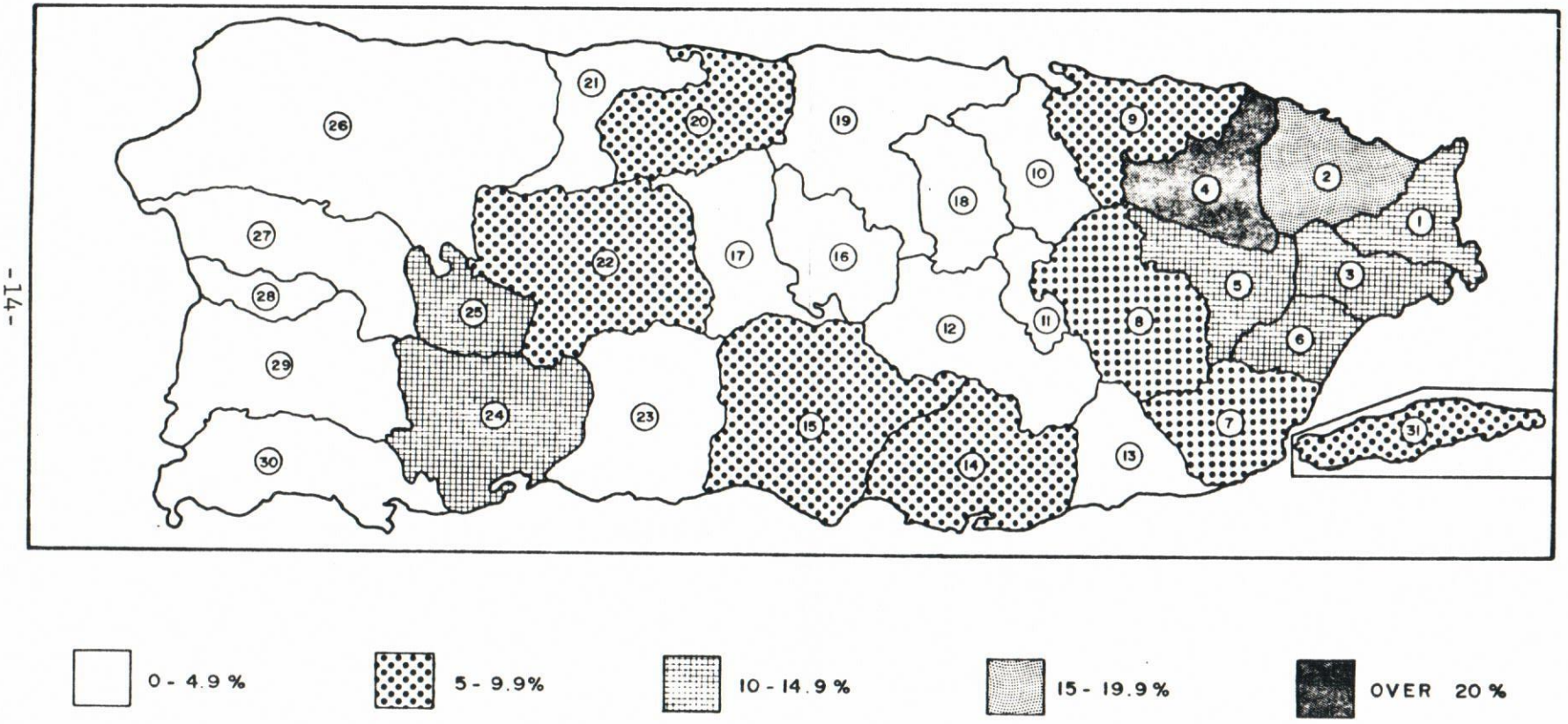


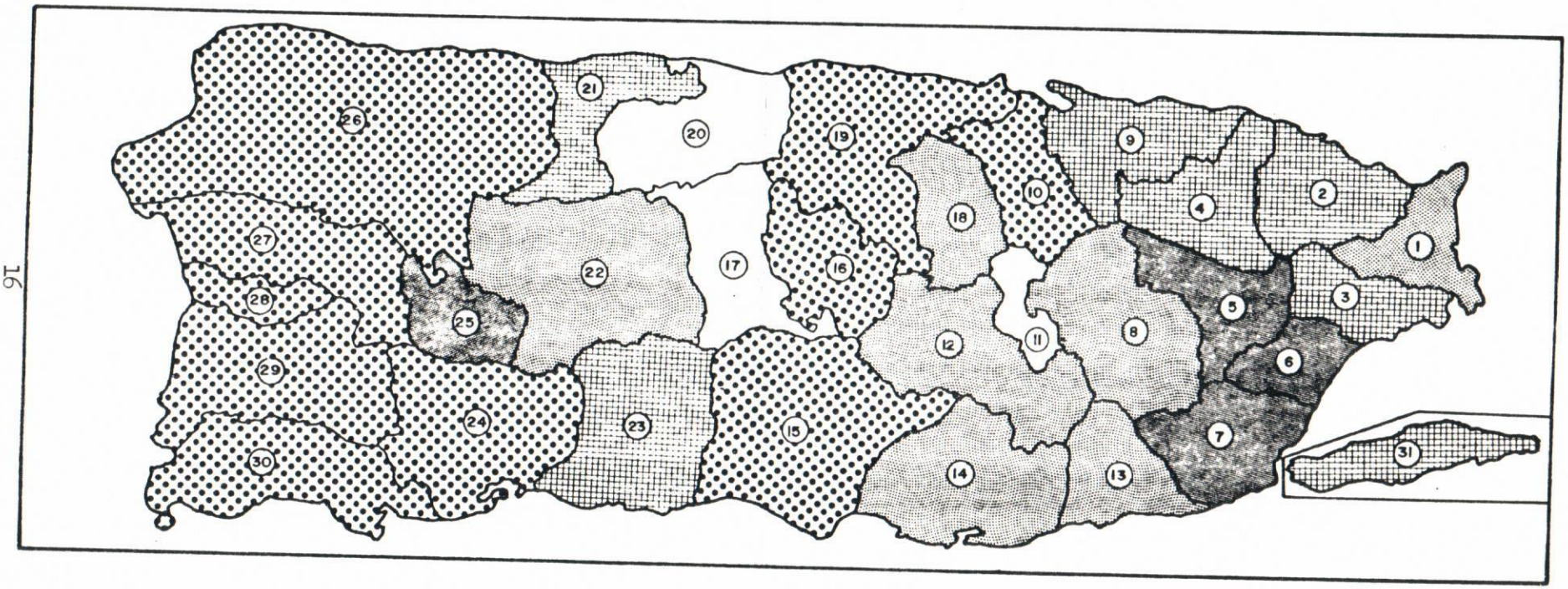
FIGURE 1

DISCUSSION

The similar natures of the 1976 survey and the 1969 survey made it possible to compare geographic changes in the reactor rates. The rate for the island as a whole decreased to 6% ± 1%, less than half of what it had been in 1969 [2]. This decrease was general throughout the island, occurring in 28 of 31 watersheds. The occurrence of highest rates in northeastern Puerto Rico indicated a marked change in the geographic distribution of schistosomiasis. The high rate areas were previously concentrated in the south-east (Figure 2). In addition to the northward shift of the area of highest reactor rates there was an extension of the non-endemic area with virtually no infected persons, namely watersheds which had fewer than 5% positive reactors (Figure 1). This covered 15 watersheds in 1976, compared to only three watersheds in 1969 (Figure 2).

The exact correlation between reactivity to the adult worm antigen and schistosome infection has not been established, but it is clear that periodic testing with the same methodology gives an indication of trends in infection rates, especially in terms of relative geographical changes. This information, while not corresponding quantitatively to transmission rates, is useful for establishing priorities for control programs and for assessing trends in transmission [5].

1969 PREVALENCE OF SCHISTOSOMIASIS IN PUERTO RICO FROM SKIN TEST SURVEY



0 - 4.9 %

5 - 9.9 %

10 - 14.9 %

15 - 19.9 %

OVER 20 %

The ultimate use of the 3 similar island-wide surveys is to quantitatively evaluate the effectiveness of the schistosomiasis control program, and to define the current distribution of the infection throughout Puerto Rico. This is a complicated matter requiring calibration of the skin test reactivity from each survey with prevalence data by fecal examinations, and adjustment of the results from the 1963 survey to conform to the methodologies of the 1969 and 1976 surveys. When these various calibrations and adjustments are accomplished, the final evaluation will be made[6].

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A P P E N D I X

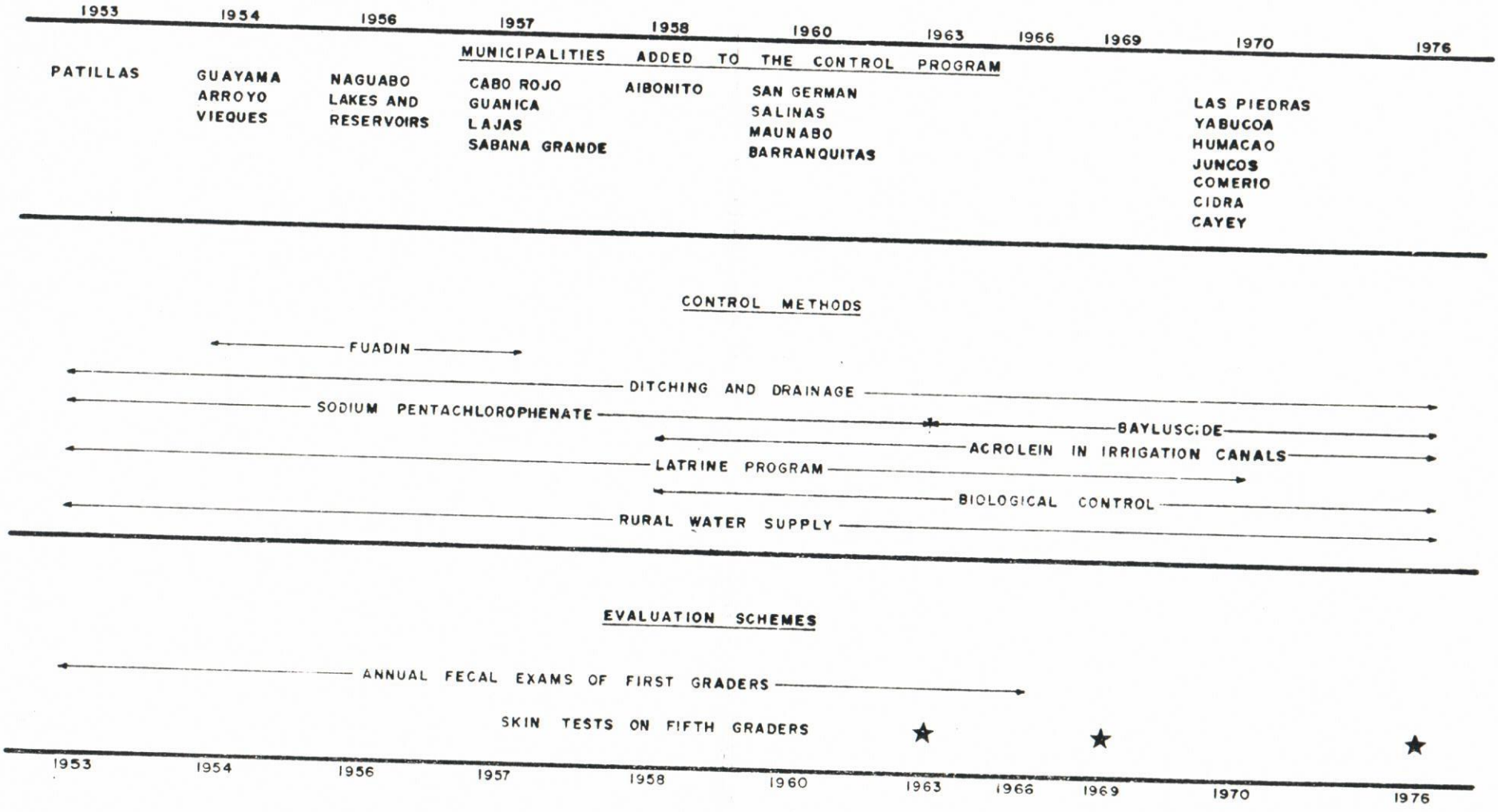
The following appendix contains the maps and tables for the skin test reactor rates by school for the 25% of schools in the 1976 sample. There is one map and one table for each of the 31 watersheds. Additional tables and information from the 1963 and 1969 surveys can be found in the draft publication of CEER entitled "Schistosomiasis prevalence in Puerto Rico, 1976" by Negrón and Nazario, May 1977.

LIST OF ITEMS

TABLE A

REACTOR RATES BY WATERSHEDS FROM SKIN TEST FOR SCHISTOSOMIASIS IN FIFTH GRADERS OF PUERTO RICO, 1976

URBAN SCHOOLS		RURAL SCHOOLS		URBAN AND RURAL COMBINED			
NUMBER TESTED	PREVALENCE RATE (PERCENT)	NUMBER TESTED	PREVALENCE RATE (PERCENT)	AVERAGE ANTIGEN AREA	PREVALENCE RATE	STANDARD DEVIATION	WATERSHED AREA
187	6.4 %	84	17.5	0.69	10.3 %	± 2.2 %	1
104	25.0 %	206	11.6	0.81	16.4 %	± 2.9 %	2
47	19.1 %	103	5.8	0.70	10.4 %	± 2.9 %	3
123	21.1 %	210	19.5	0.83	20.7 %	± 3.6 %	4
152	12.5 %	163	10.4	0.67	11.6 %	± 2.2 %	5
112	10.7 %	170	10.0	0.75	10.1 %	± 2.0 %	6
134	9.1 %	143	4.2	0.66	5.7 %	± 1.1 %	7
189	7.4 %	219	6.4	0.53	7.2 %	± 1.0 %	8
396	5.0 %	139	5.8	0.62	5.2 %	± 0.5 %	9
259	2.3 %	140	0.0	0.54	1.7 %	± 0.2 %	10
0	0.0 %	127	3.2	0.50	3.2 %	± 1.1 %	11
178	2.4 %	208	6.3	0.52	4.5 %	± 0.8 %	12
107	1.9 %	166	3.0	0.59	2.9 %	± 0.7 %	13
96	6.1 %	205	7.3	0.62	6.8 %	± 1.2 %	14
165	8.5 %	224	7.1	0.66	8.2 %	± 1.4 %	15
53	1.9 %	186	3.8	0.61	3.3 %	± 0.8 %	16
44	6.8 %	166	2.0	0.61	2.8 %	± 1.1 %	17
114	0.9 %	187	1.1	0.51	1.0 %	± 0.3 %	18
211	1.4 %	220	1.6	0.55	1.4 %	± 0.2 %	19
139	7.2 %	165	3.6	0.70	5.2 %	± 1.0 %	20
143	3.5 %	129	3.9	0.68	3.7 %	± 0.8 %	21
187	2.8 %	281	6.6	0.58	5.1 %	± 1.0 %	22
246	6.1 %	215	6.3	0.63	4.9 %	± 0.7 %	23
216	11.3 %	278	13.8	0.73	13.3 %	± 2.4 %	24
0	0.0 %	98	10.2	0.72	10.2 %	± 3.2 %	25
324	3.6 %	421	1.2	0.55	2.4 %	± 0.3 %	26
133	2.3 %	221	0.2	0.47	1.5 %	± 0.4 %	27
191	4.2 %	69	0.0	0.49	3.1 %	± 0.8 %	28
180	4.3 %	233	3.6	0.50	3.7 %	± 0.6 %	29
121	8.3 %	168	2.4	0.54	4.8 %	± 1.1 %	30
28	0.0 %	101	9.9	0.71	7.8 %	± 1.6 %	31



CHRONOLOGY OF THE SCHISTOSOMIASIS CONTROL PROGRAM IN PUERTO RICO

TABLE B

FAJARDO , CEIBA

MAP I, AREA NO. I

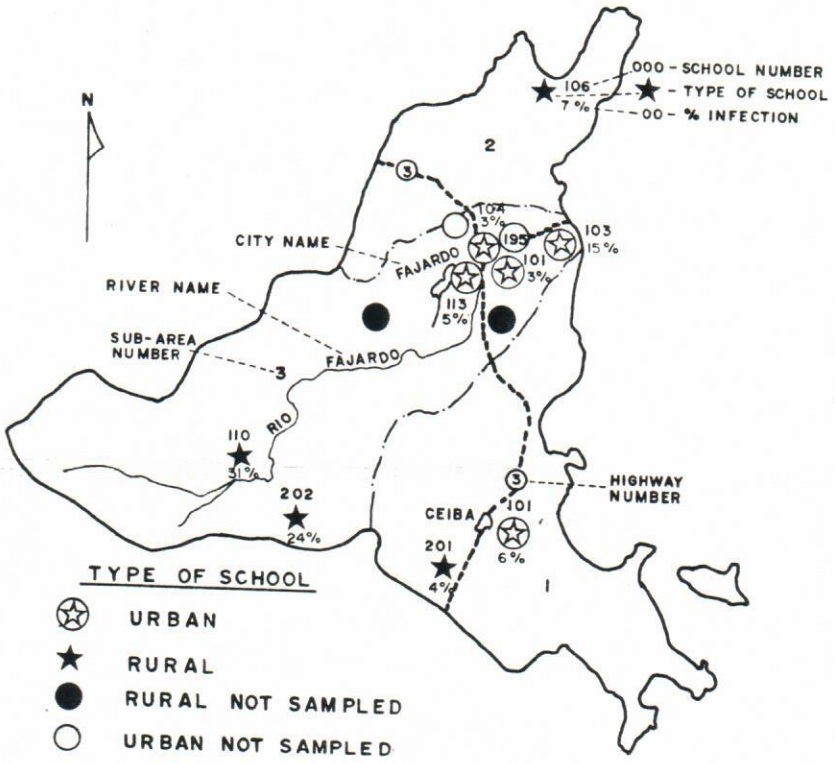


TABLE 1. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

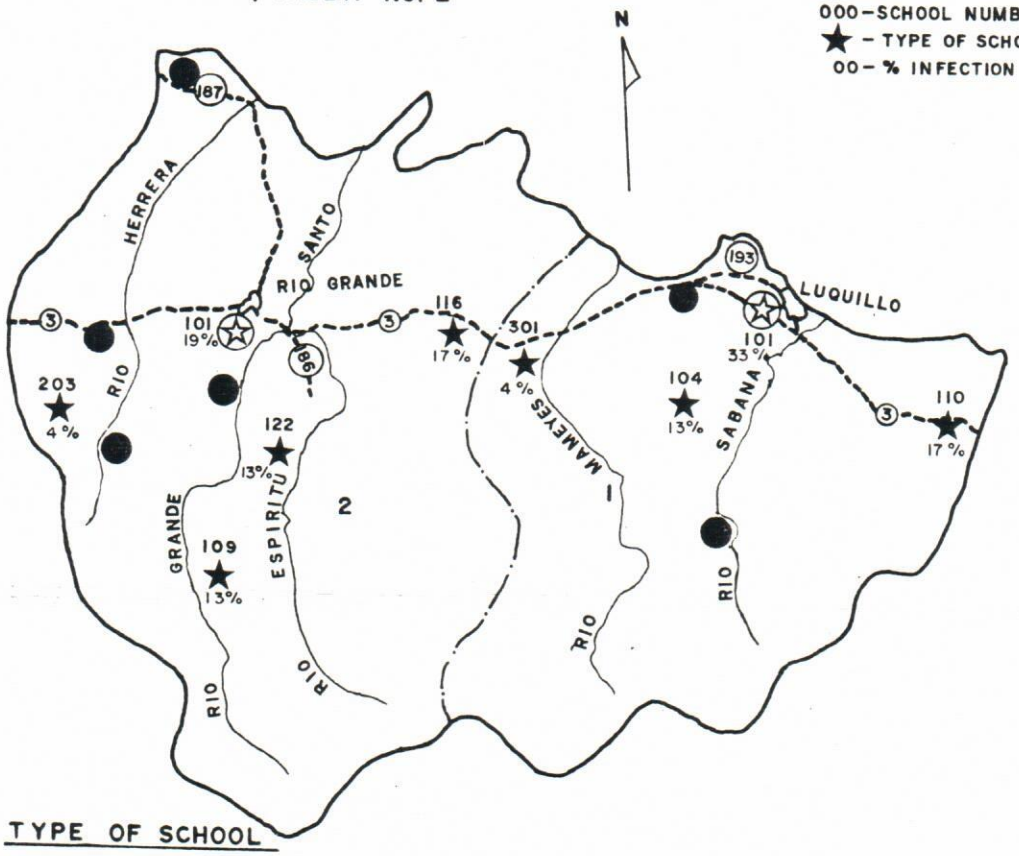
WATERSHED AREA 1

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	13160110[illegible]-1	37	3	8.1	0.7
1	13160110[illegible]-2	35	1	2.9	0.6
3	13260110[illegible]-1	29	1	3.4	0.6
3	13260110[illegible]-1	34	5	14.7	0.8
3	13260110[illegible]-1	31	1	3.2	0.6
3	13260111[illegible]-1	21	1	4.8	0.6
	TOTAL	187	12	6.4	0.7
	RURAL				
1	13160220[illegible]-1	25	1	4.0	0.4
2	13260210[illegible]-1	14	1	7.1	1.0
3	13160220[illegible]-1	29	7	24.1	0.8
3	13260211[illegible]-1	16	5	31.3	1.0
	TOTAL	84	14	16.7	0.8
	GRAND-TOTAL	271	26	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

RIO GRANDE, LUQUILLO

MAP 2, AREA NO. 2



TYPE OF SCHOOL

- URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 2. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 2

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	134401101-1	42	14	33.3	1.0
2	135901101-1	31	6	19.4	0.9
2	135901101-2	31	6	19.4	0.9
	TOTAL	104	26	25.0	0.9
	RURAL				
1	134402104-1	24	3	12.5	0.7
1	134402110-1	35	6	17.1	0.8
1	135902301-1	28	1	3.6	0.7
2	135902109-1	32	4	12.5	0.8
2	135902116-1	30	5	16.7	0.9
2	135902122-1	30	4	13.3	0.9
2	135902203-1	27	1	3.7	0.6
	TOTAL	206	24	11.7	0.8
	GRAND-TOTAL	310	50	*	0.8

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

NAGUABO

MAP 3, AREA NO. 3

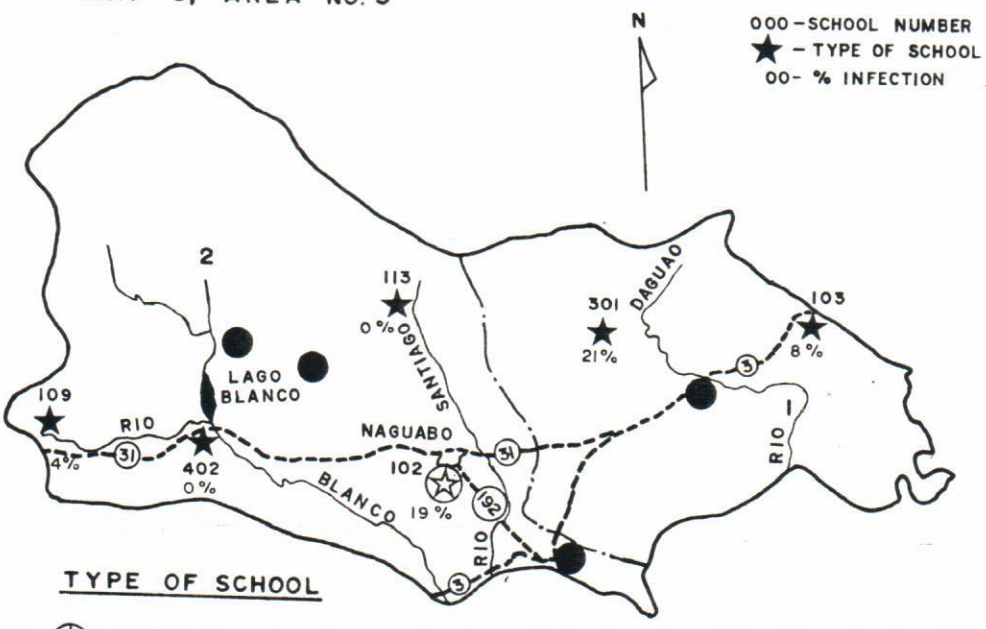


TABLE 3. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 3

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	135101102-1	21	1	4.8	0.7
2	135101102-2	26	8	30.8	1.0
	TOTAL	47	9	19.1	0.9
	RURAL				
1	131802103-1	13	1	7.7	0.5
1	135102301-1	14	3	21.4	0.9
2	135102109-1	27	1	3.7	0.6
2	135102109-2	19	1	5.3	0.6
2	135102113-1	16	0	0.0	0.7
2	135102402-1	14	0	0.0	0.6
	TOTAL	103	6	5.8	0.6
	GRAND-TOTAL	150	15	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

TRUJILLO ALTO, CAROLINA, LOIZA

MAP 4, AREA NO. 4

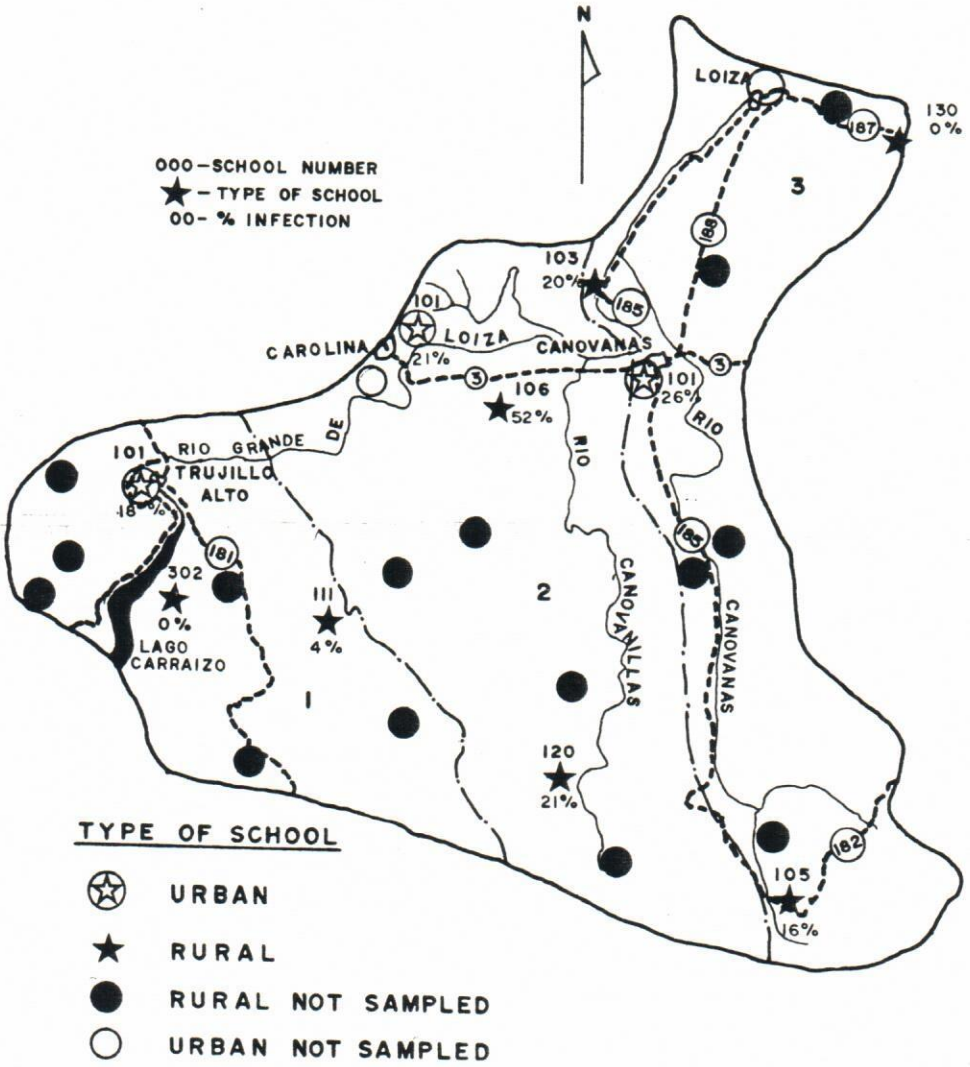


TABLE 4. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 4

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	127001101-1	38	7	18.4	0.8
2	161501101-1	29	5	17.2	0.9
2	161501101-2	29	7	24.1	0.9
3	134301101-1	27	7	25.9	0.9
	TOTAL	123	26	21.1	0.9
	RURAL				
1	127002111-1	26	1	3.8	0.6
1	127002302-1	23	0	0.0	0.7
2	161502106-1	46	24	52.2	1.1
2	161502120-1	28	6	21.4	0.8
3	134302103-1	25	5	20.0	0.9
3	134302105-1	32	5	15.6	0.8
3	134312130-1	30	0	0.0	0.5
	TOTAL	210	41	19.5	0.8
	GRAND-TOTAL	333	67	*	0.8

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

GURABO, JUNCOS, LAS PIEDRAS

MAP 5, AREA NO. 5

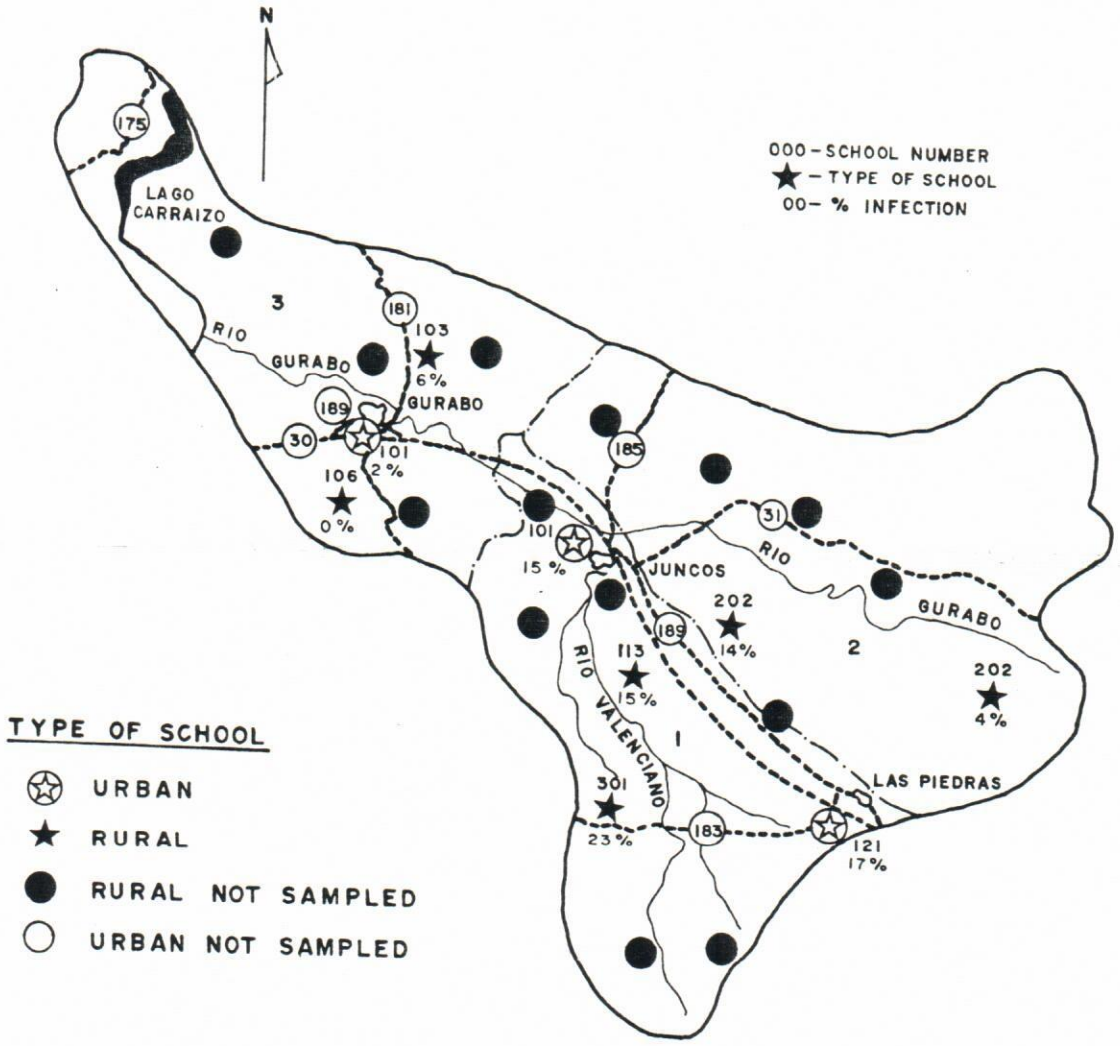


TABLE 5. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 5

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	133801101-1	28	6	21.4	0.7
1	133801101-2	31	3	9.7	0.6
1	134201121-1	22	3	13.6	0.8
1	134201121-2	30	6	20.0	0.9
3	123101101-1	41	1	2.4	0.5
	TOTAL	152	19	12.5	0.7
	RURAL				
1	133802103-1	27	4	14.8	0.8
1	133802301-1	30	7	23.3	0.9
2	133802202-1	21	3	14.3	0.8
2	134202202-1	25	1	4.0	0.6
3	123102103-1	17	2	11.8	0.6
3	123102103-2	19	0	0.0	0.4
3	123102106-1	24	0	0.0	0.4
	TOTAL	163	17	10.4	0.7
	GRAND-TOTAL	315	36	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

HUMACAO

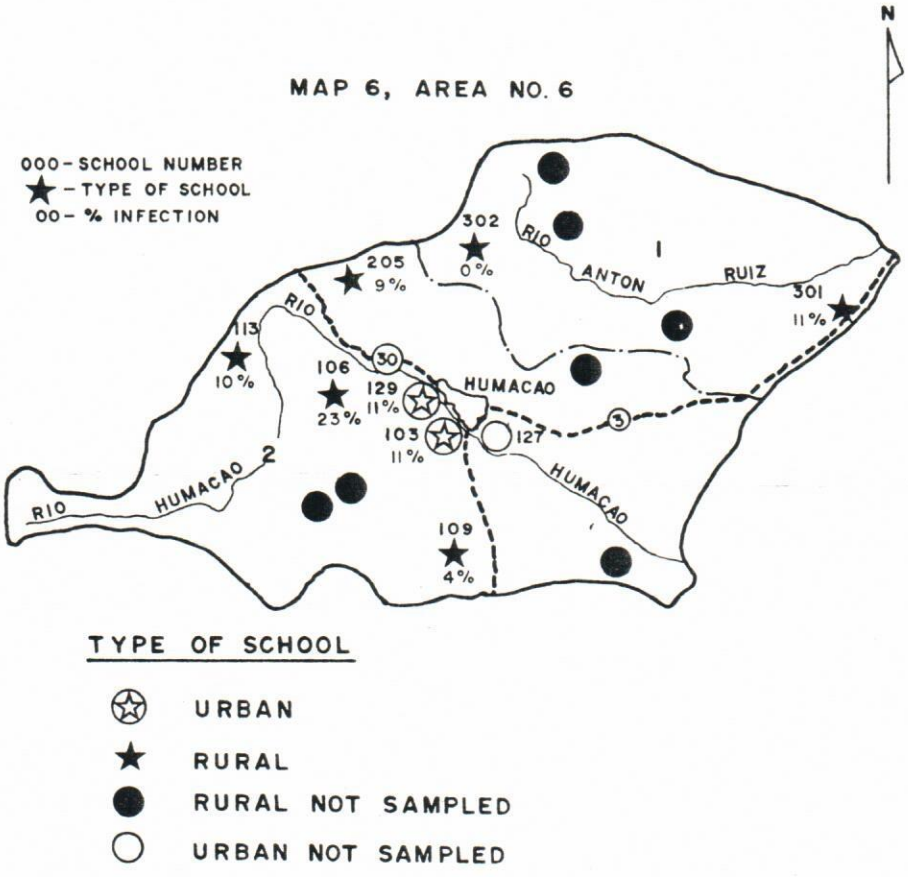

N
MAP 6, AREA NO. 6
000 - SCHOOL NUMBER
★ - TYPE OF SCHOOL
00 - % INFECTION
302
0%
205
9%
RIO
ANTON
RUIZ
1
301
11%
113
10%
RIO
106
23%
129
11%
30
HUMACAO
103
11%
127
3
RIO
HUMACAO
2
HUMACAO
109
4%
TYPE OF SCHOOL
URBAN
RURAL
RURAL NOT SAMPLED
URBAN NOT SAMPLED

TABLE 6. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 6

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	13340110 3-1	31	2	6.5	0.7
2	13340110 3-2	26	4	15.4	0.9
2	13340112 9-1	26	2	7.7	0.8
2	13340112 9-2	29	4	13.8	0.8
	TOTAL	112	12	10.7	0.8
	RURAL				
1	13340230 1-1	28	3	10.7	0.8
1	13340230 2-1	25	0	0.0	0.6
2	13420211 3-1	31	3	9.7	0.7
2	13340210 6-1	31	7	22.6	0.9
2	13340210 9-1	23	1	4.3	0.7
2	13420220 5-1	32	3	9.4	0.7
	TOTAL	170	17	10.0	0.7
	GRAND-TOTAL	282	29	*	0.8

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

YABUCOA, MAUNABO

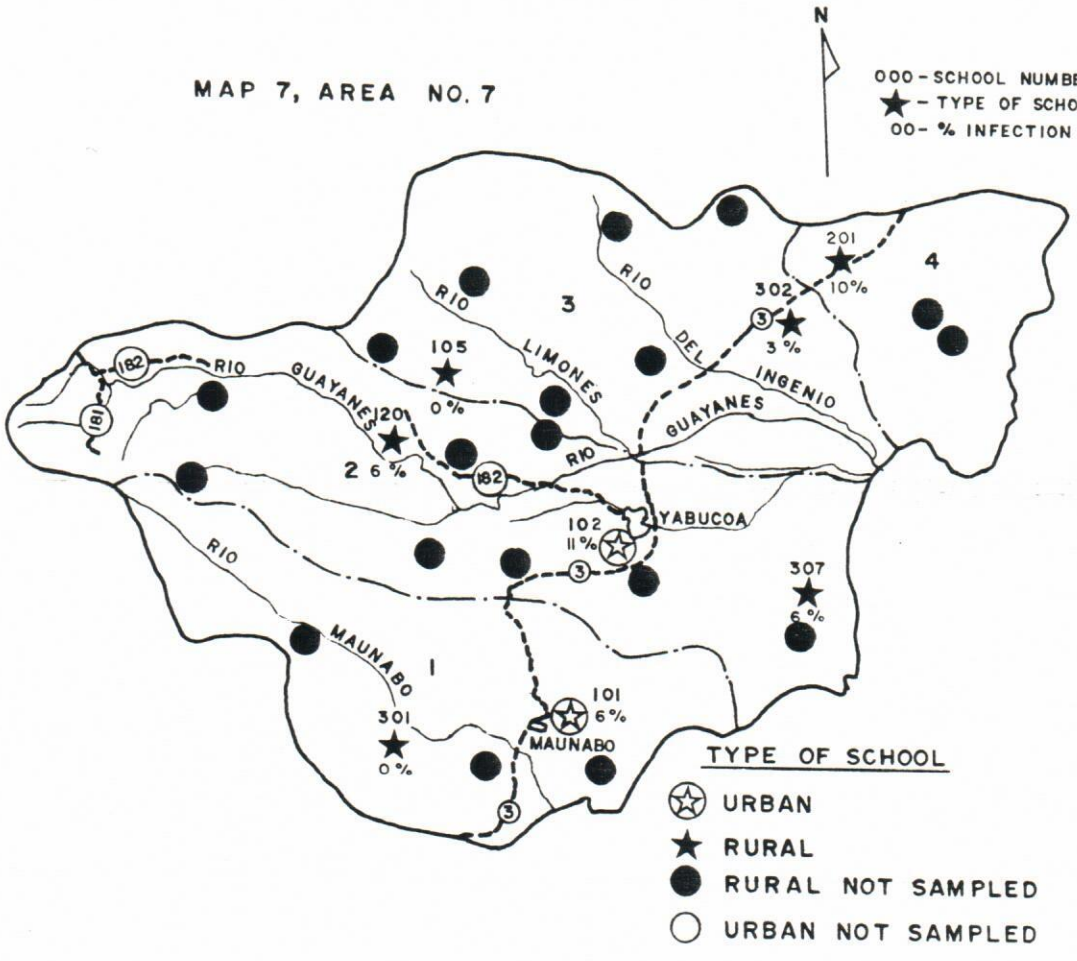


TABLE 7. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 7

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	13470110[illegible]-1	29	2	6.9	0.7
1	13470110[illegible]-2	22	0	0.0	0.7
1	13470110[illegible]-3	21	2	9.5	0.6
2	13700110[illegible]-1	31	2	6.5	0.8
2	13700110[illegible]-2	31	5	16.1	0.9
	TOTAL	134	11	8.2	0.7
	RURAL				
1	13470230[illegible]-1	24	0	0.0	0.6
2	13700212[illegible]-1	18	1	5.6	0.6
2	13700230[illegible]-1	17	1	5.9	0.6
3	13700210[illegible]-1	19	0	0.0	0.5
3	13700230[illegible]-1	36	1	2.8	0.5
4	13340220[illegible]-1	29	3	10.3	0.8
	TOTAL	143	6	4.2	0.6
	GRAND-TOTAL	277	17	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

SAN LORENZO, CAGUAS, AGUAS BUENAS

MAP 8, AREA NO. 8

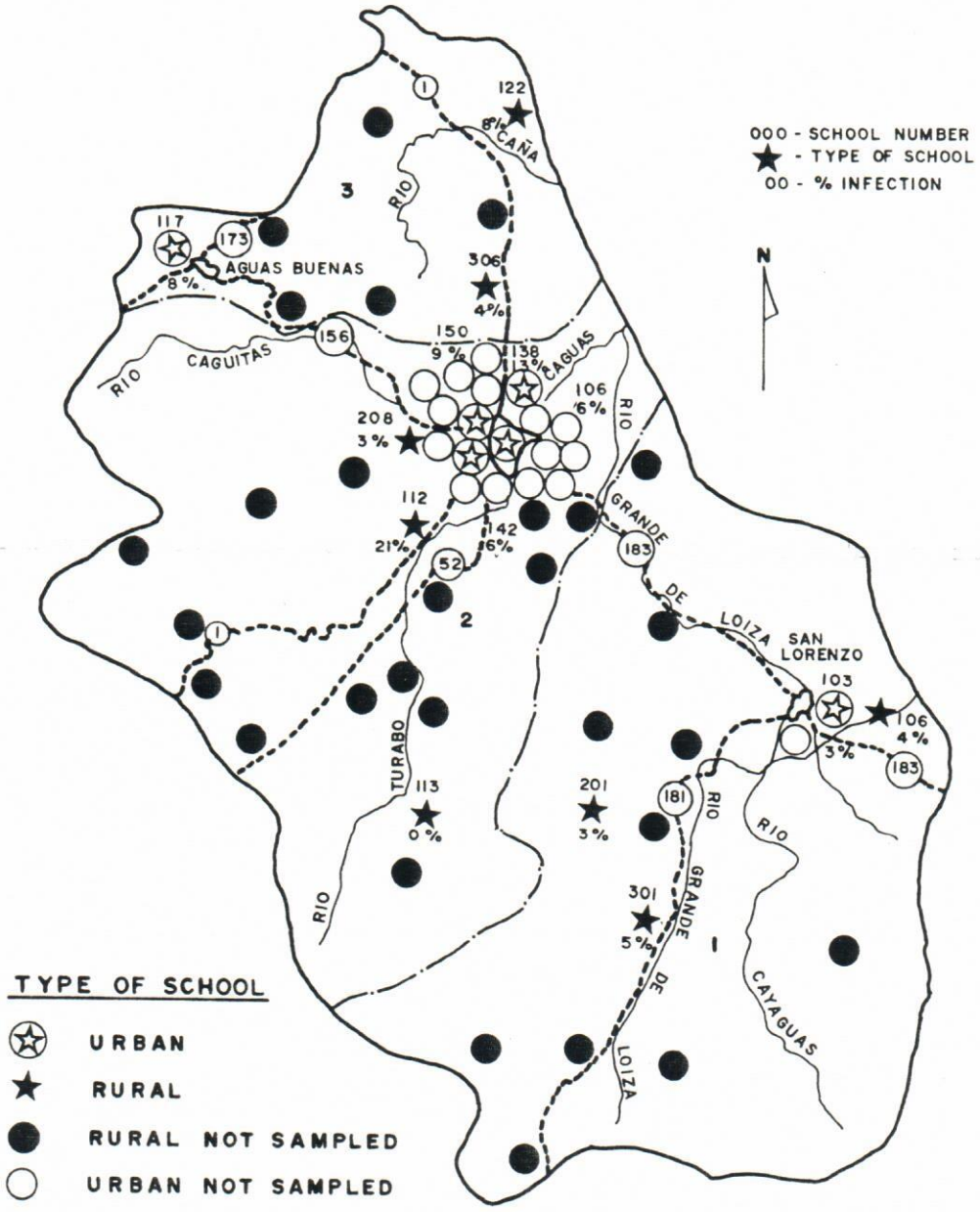


TABLE 8. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 8

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	126501103-1	35	1	2.9	0.4
2	121301106-1	32	2	6.3	0.5
2	121301138-1	30	4	13.3	0.6
2	121301142-1	35	2	5.7	0.6
2	121301150-1	32	3	9.4	0.6
3	120401117-1	25	2	8.0	0.5
	TOTAL	189	14	7.4	0.5
	RURAL				
1	126502106-1	26	1	3.8	0.4
1	126502201-1	32	1	3.1	0.4
1	126502301-1	39	2	5.1	0.5
2	121302112-1	29	6	20.7	0.7
2	121302113-1	15	0	0.0	0.4
2	121302208-1	31	1	3.2	0.6
3	121302122-1	24	2	8.3	0.6
3	121302306-1	23	1	4.3	0.6
	TOTAL	219	14	6.4	0.5
	GRAND-TOTAL	408	28	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

SAN JUAN, RIO PIEDRAS

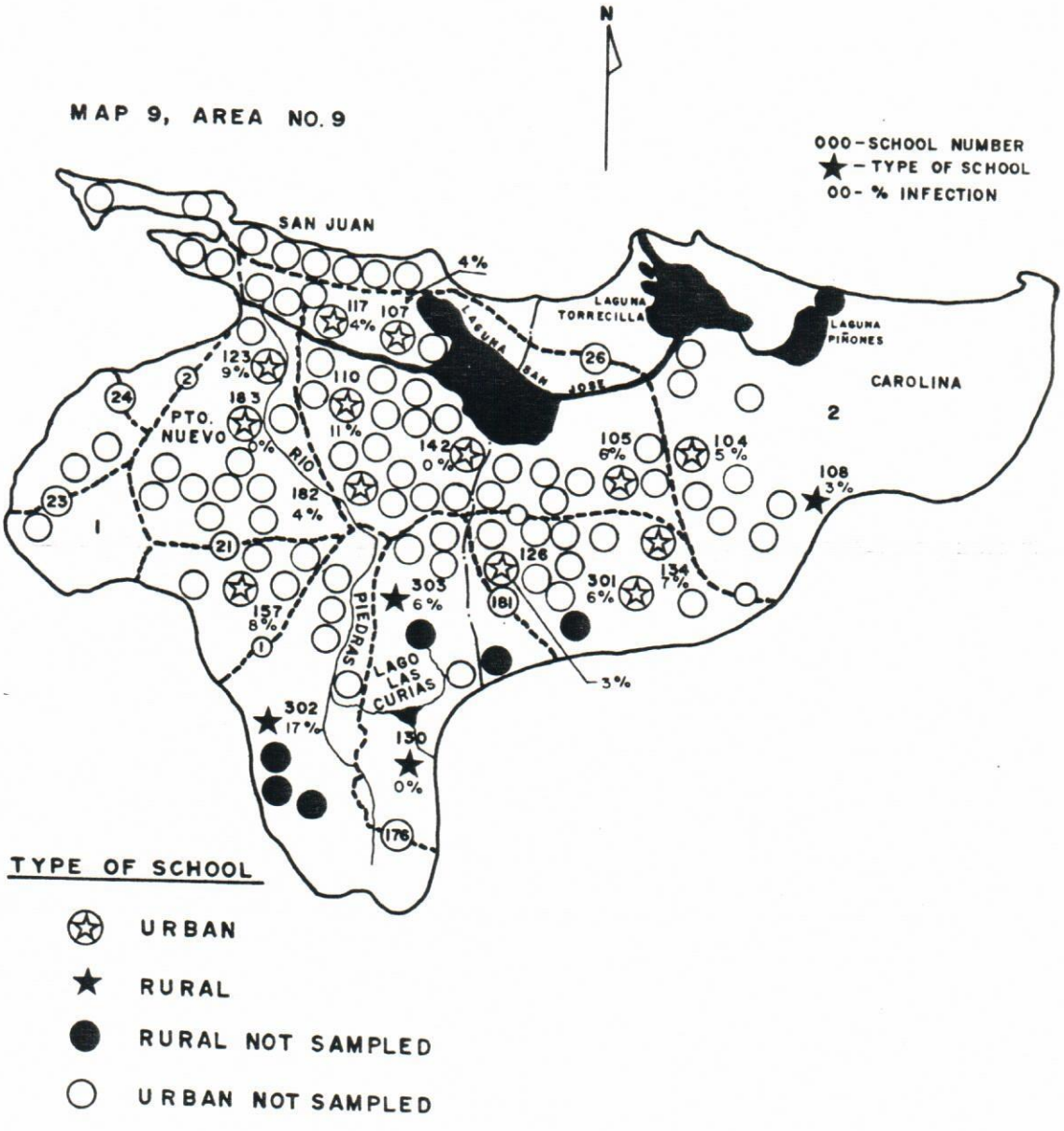


TABLE 9. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

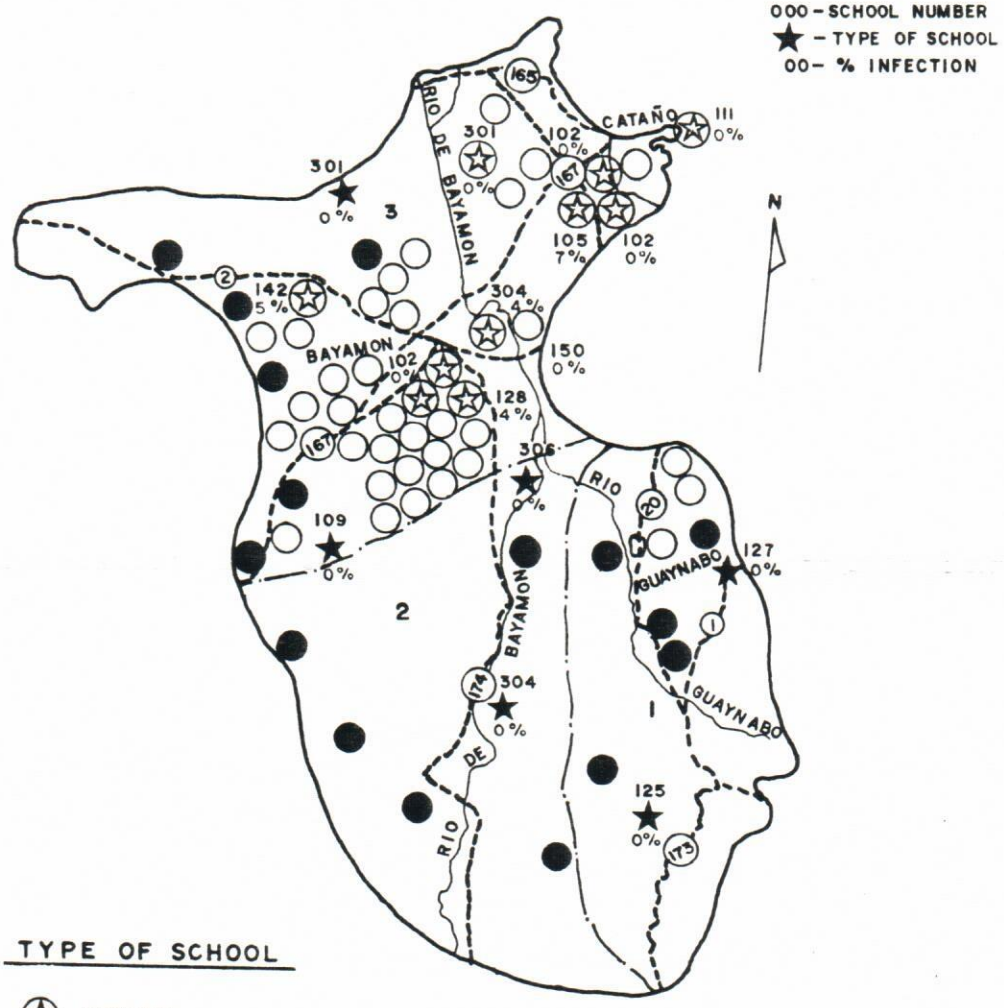
WATERSHED AREA 9

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	16001[illegible]3-1	35	3	8.6	0.8
1	16001[illegible]7-1	25	2	8.0	0.6
1	16001[illegible]2-1	26	1	3.8	0.6
1	16001[illegible]5-1	29	0	0.0	0.6
1	16002[illegible]0-1	27	3	11.1	0.7
1	16002[illegible]2-1	34	0	0.0	0.6
1	16041[illegible]7-1	26	1	3.8	0.4
1	16042[illegible]7-1	28	1	3.6	0.7
2	16150[illegible]4-1	37	2	5.4	0.7
2	16150[illegible]4-1	30	2	6.7	0.7
2	16150[illegible]1-1	35	2	5.7	0.6
2	16002[illegible]5-1	34	2	5.9	0.7
2	16003[illegible]0-1	30	1	3.3	0.6
	TOTAL	396	20	5.1	0.6
	RURAL				
1	16003[illegible]0-1	38	0	0.0	0.6
1	16003[illegible]2-1	29	5	17.2	0.5
1	16003[illegible]5-1	34	2	5.9	0.6
2	16150[illegible]8-1	38	1	2.6	0.6
	TOTAL	139	8	5.8	0.6
	GRAND-TOTAL	535	28	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

BAYAMON, CATAÑO, GUAYNABO

MAP 10, AREA NO. 10



TYPE OF SCHOOL

- URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 10. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

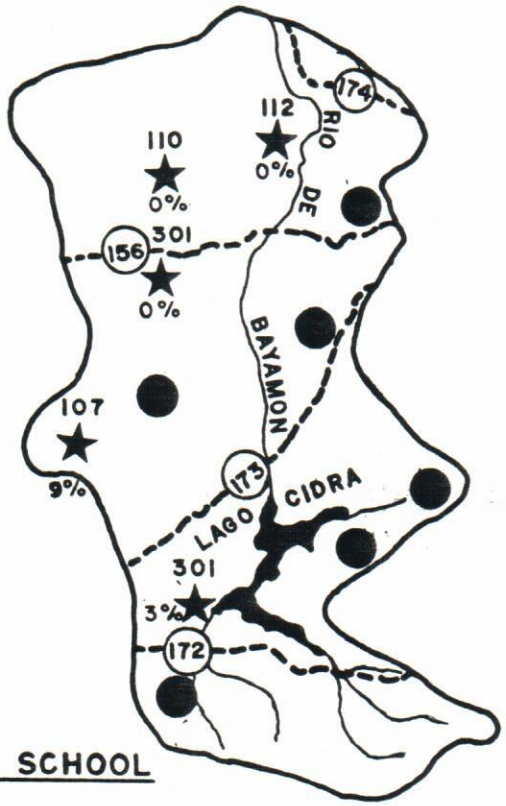
WATERSHED AREA 10

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
3	161111102-1	20	0	0.0	0.4
3	161111142-1	37	2	5.4	0.6
3	161111304-1	27	1	3.7	0.5
3	161121125-1	28	1	3.6	0.6
3	161121159-1	29	0	0.0	0.5
3	161001102-1	15	0	0.0	0.5
3	161001105-1	29	2	6.9	0.7
3	161001111-1	20	0	0.0	0.5
3	161001301-1	31	0	0.0	0.6
3	163001102-1	23	0	0.0	0.5
	TOTAL	259	6	2.3	0.5
	RURAL				
1	163002125-1	21	0	0.0	0.5
1	166032127-1	22	0	0.0	0.6
2	161122306-1	22	0	0.0	0.5
2	163002304-1	32	0	0.0	0.5
3	161122109-1	19	0	0.0	0.6
3	166902301-1	24	0	0.0	0.6
	TOTAL	140	0	0.0	0.5
	RURAL				
	GRAND-TOTAL	399	6	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

UPPER BAYAMÓN

MAP II, AREA NO. II



N

000 - SCHOOL NUMBER
★ - TYPE OF SCHOOL
00 - % INFECTION

TYPE OF SCHOOL

- ☆ URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 11. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 11

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	RURAL				
1	120402110-1	26	0	0.0	0.6
1	120402112-1	11	0	0.0	0.6
1	120402301-1	26	0	0.0	0.5
1	122002107-1	35	3	8.6	0.6
1	122002301-1	29	1	3.4	0.4
	TOTAL	127	4	3.1	0.5
	GRAND-TOTAL	127	4	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

COMERIO, BARRANQUITAS, AIBONITO CIDRA, CAYEY

MAP 12, AREA NO. 12

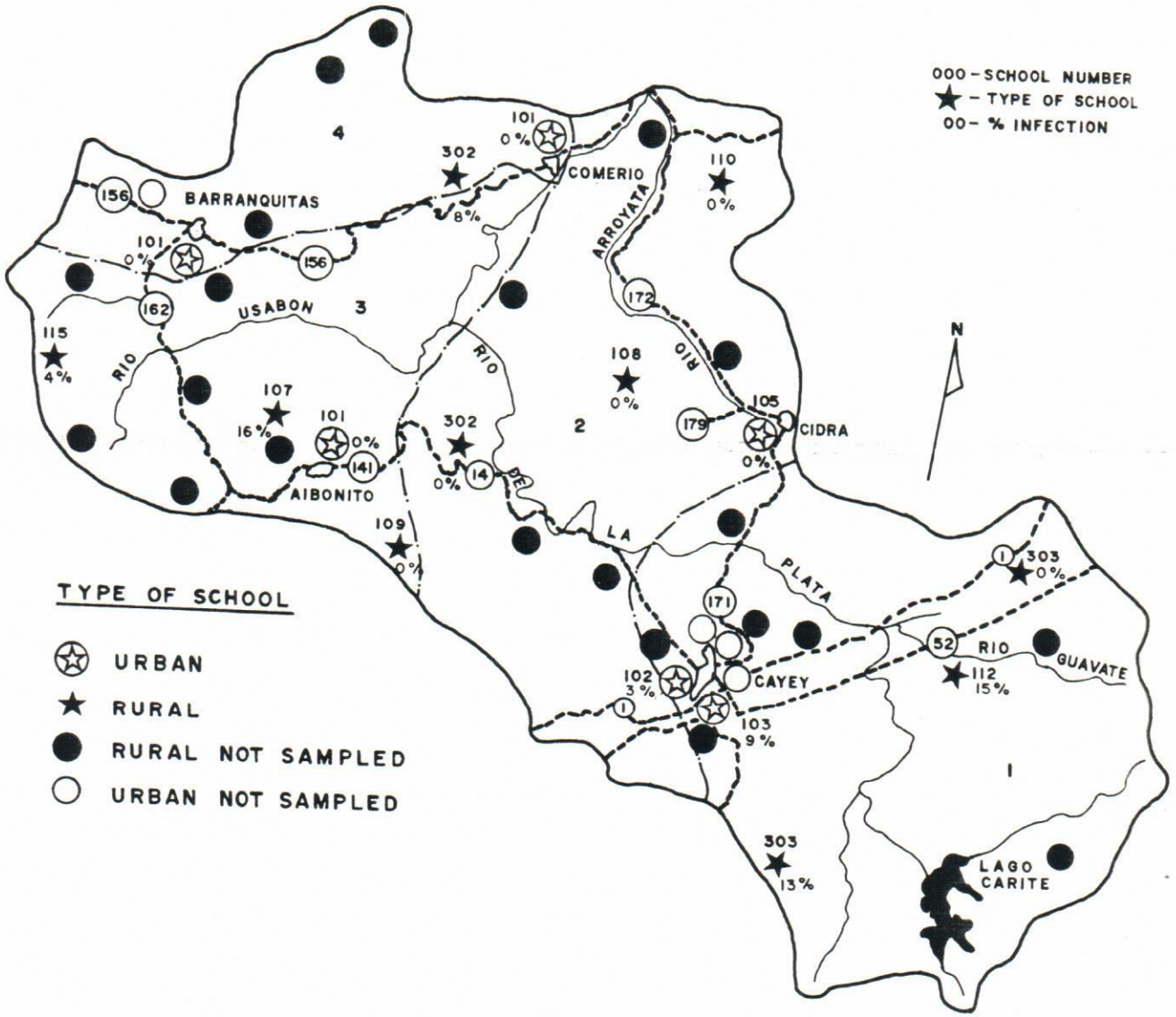


TABLE 12. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

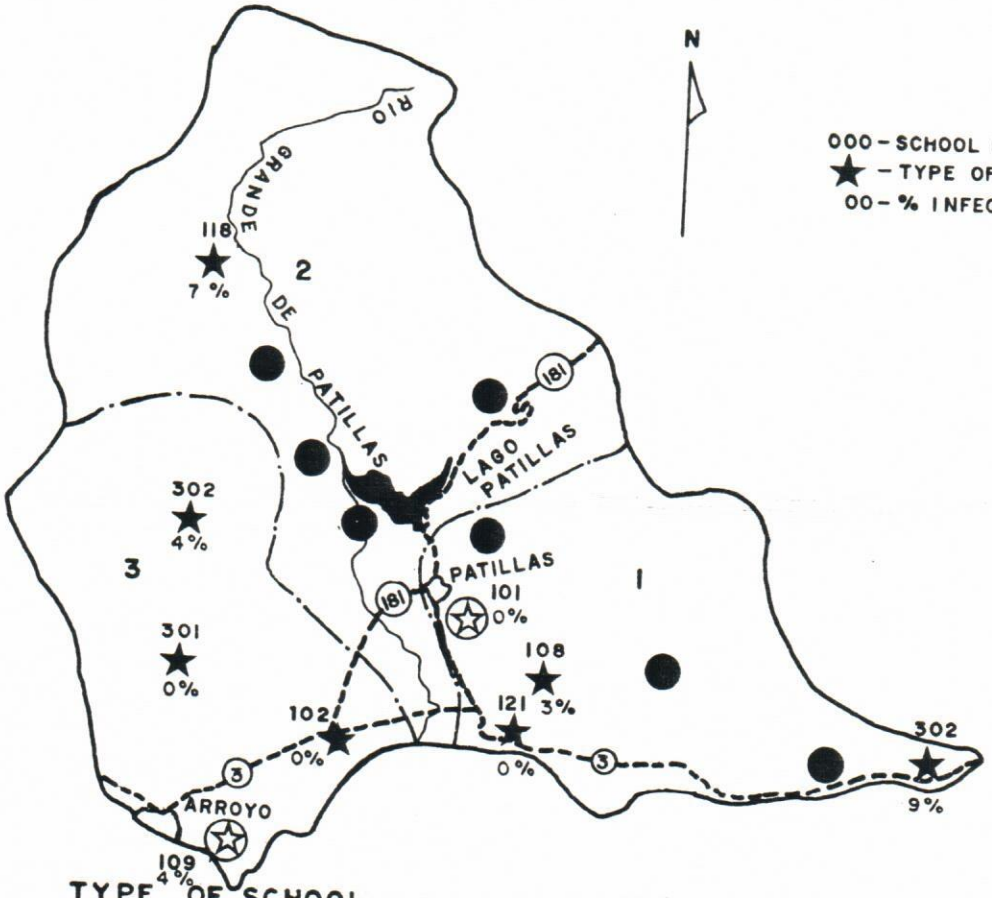
WATERSHED AREA 12

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	121701102-1	31	1	3.2	0.6
1	121701103-1	32	3	9.4	0.5
2	122001103-1	24	0	0.0	0.3
3	120501101-1	37	0	0.0	0.6
4	121001101-1	28	0	0.0	0.6
4	122201101-1	26	0	0.0	0.5
	TOTAL	178	4	2.2	0.5
	RURAL				
1	121702112-1	26	4	15.4	0.7
1	121702303-1	32	4	12.5	0.7
1	122002303-1	22	0	0.0	0.5
2	120502302-1	16	0	0.0	0.5
2	122002108-1	27	0	0.0	0.4
2	122202110-1	11	0	0.0	0.4
3	120502107-1	19	3	15.8	0.7
3	120502109-1	20	0	0.0	0.5
3	152102115-1	23	1	4.3	0.6
4	122202302-1	12	1	8.3	0.6
	TOTAL	208	13	6.3	0.5
	GRAND-TOTAL	386	17	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

PATILLAS, ARROYO

MAP 13, AREA NO. 13



TYPE OF SCHOOL

- URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 13. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

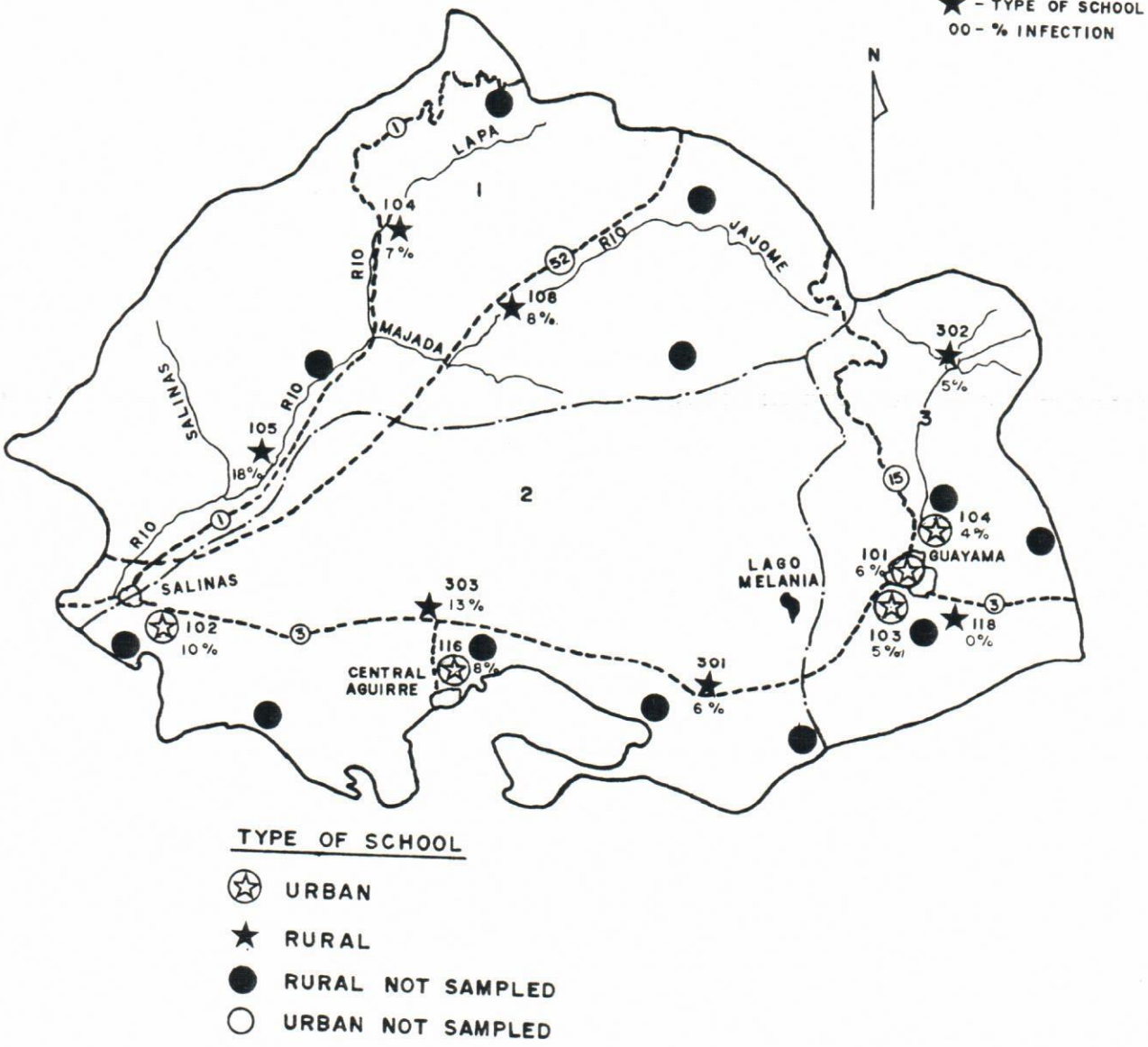
WATERSHED AREA 13

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	13540110[illegible]-1	32	0	0.0	0.5
1	13540110[illegible]-2	25	0	0.0	0.6
3	15080110[illegible]-1	21	1	4.8	0.7
3	15080110[illegible]-2	29	1	3.4	0.6
	TOTAL	107	2	1.9	0.6
	RURAL				
1	13540210[illegible]-1	29	1	3.4	0.6
1	13540212[illegible]-1	15	0	0.0	0.6
1	13540230[illegible]-1	23	2	8.7	0.7
2	13540211[illegible]-1	15	1	6.7	0.5
3	15080210[illegible]-1	28	0	0.0	0.5
3	15080230[illegible]-1	33	0	0.0	0.6
3	15080230[illegible]-1	23	1	4.3	0.7
	TOTAL	166	5	3.0	0.6
	GRAND-TOTAL	273	7	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

GUAYAMA, SALINAS

MAP 14, AREA NO. 14



TYPE OF SCHOOL

- URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 14. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 14

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	15620[illegible]02-1	20	2	10.0	0.7
2	15620[illegible]16-1	12	1	8.3	0.6
3	15280[illegible]01-1	17	1	5.9	0.7
3	15280[illegible]03-1	22	1	4.5	0.7
3	15280[illegible]04-1	25	1	4.0	0.5
	TOTAL	96	6	6.3	0.6
	RURAL				
1	15620[illegible]04-1	31	2	6.5	0.6
1	15620[illegible]05-1	22	4	18.2	0.7
1	15620[illegible]06-1	36	3	8.3	0.6
2	15620[illegible]03-1	16	2	12.5	0.6
2	15280[illegible]01-1	23	1	4.3	0.6
2	15280[illegible]01-2	28	2	7.1	0.7
3	15280[illegible]18-1	28	0	0.0	0.6
3	15280[illegible]02-1	21	1	4.8	0.6
	TOTAL	205	15	7.3	0.6
	GRAND-TOTAL	301	21	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

VILLALBA, JUANA DIAZ, COAMO, SANTA ISABEL

MAP 15, AREA NO. 15

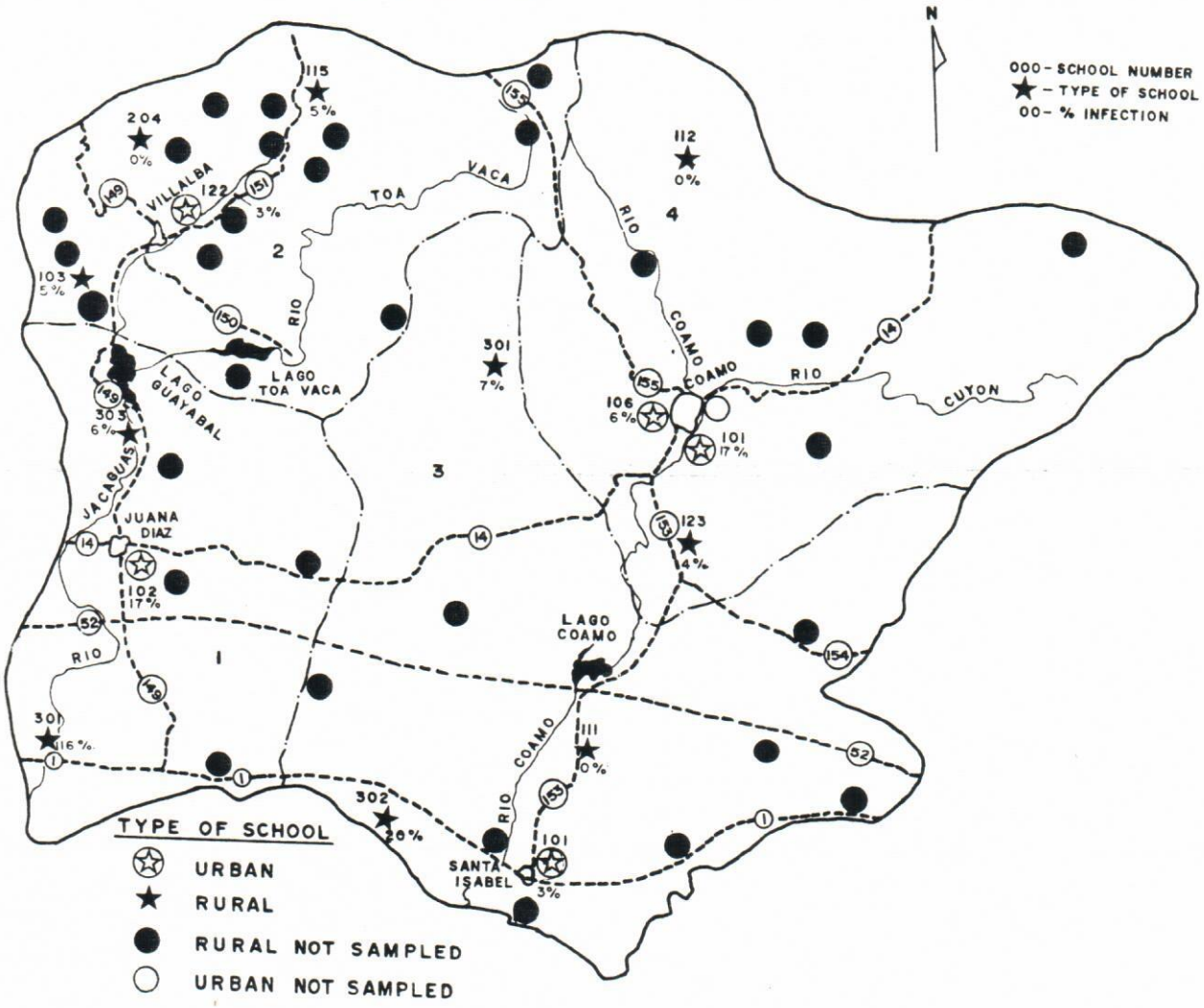


TABLE 15. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 15

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	153701102-1	30	5	16.7	0.8
2	153701122-1	38	1	2.6	0.6
3	156701101-1	32	1	3.1	0.6
4	152101101-1	29	5	17.2	0.7
4	152101106-1	35	2	5.7	0.7
	TOTAL	165	14	8.5	0.7
	RURAL				
1	153702301-1	25	4	16.0	0.7
1	153702303-1	32	2	6.3	0.6
2	153702103-1	19	1	5.3	0.7
2	153702113-1	20	1	5.0	0.7
2	153702204-1	15	0	0.0	0.6
3	152102301-1	31	2	6.5	0.6
3	156702111-1	21	0	0.0	0.7
3	156702302-1	25	5	20.0	0.8
4	152102112-1	9	0	0.0	0.8
4	152102123-1	27	1	3.7	0.7
	TOTAL	224	16	7.1	0.7
	GRAND-TOTAL	389	30	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

OROCOVIS

MAP 16, AREA NO. 16

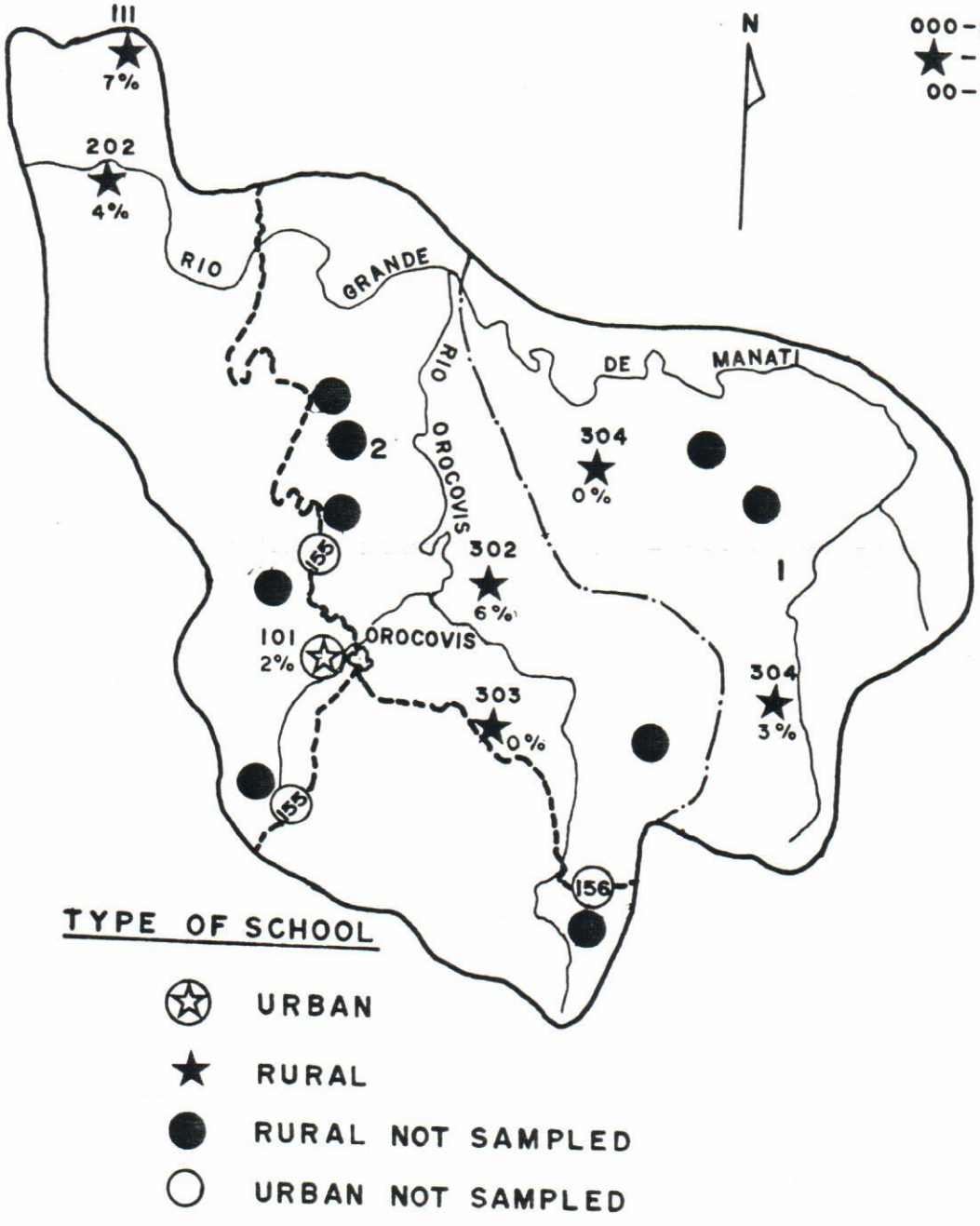


TABLE 16. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 16

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	115301101-1	31	1	3.2	0.7
2	115301101-2	22	0	0.0	0.6
	TOTAL	53	1	1.9	0.6
	RURAL				
1	121002304-1	32	1	3.1	0.5
1	102302304-1	25	0	0.0	0.5
2	115002111-1	27	2	7.4	0.6
2	115002202-1	26	1	3.8	0.6
2	115302302-1	23	2	8.7	0.7
2	115302302-2	26	1	3.8	0.7
2	115302303-1	27	0	0.0	0.6
	TOTAL	186	7	3.8	0.6
	GRAND-TOTAL	239	8	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

CIALES

MAP 17, AREA NO. 17

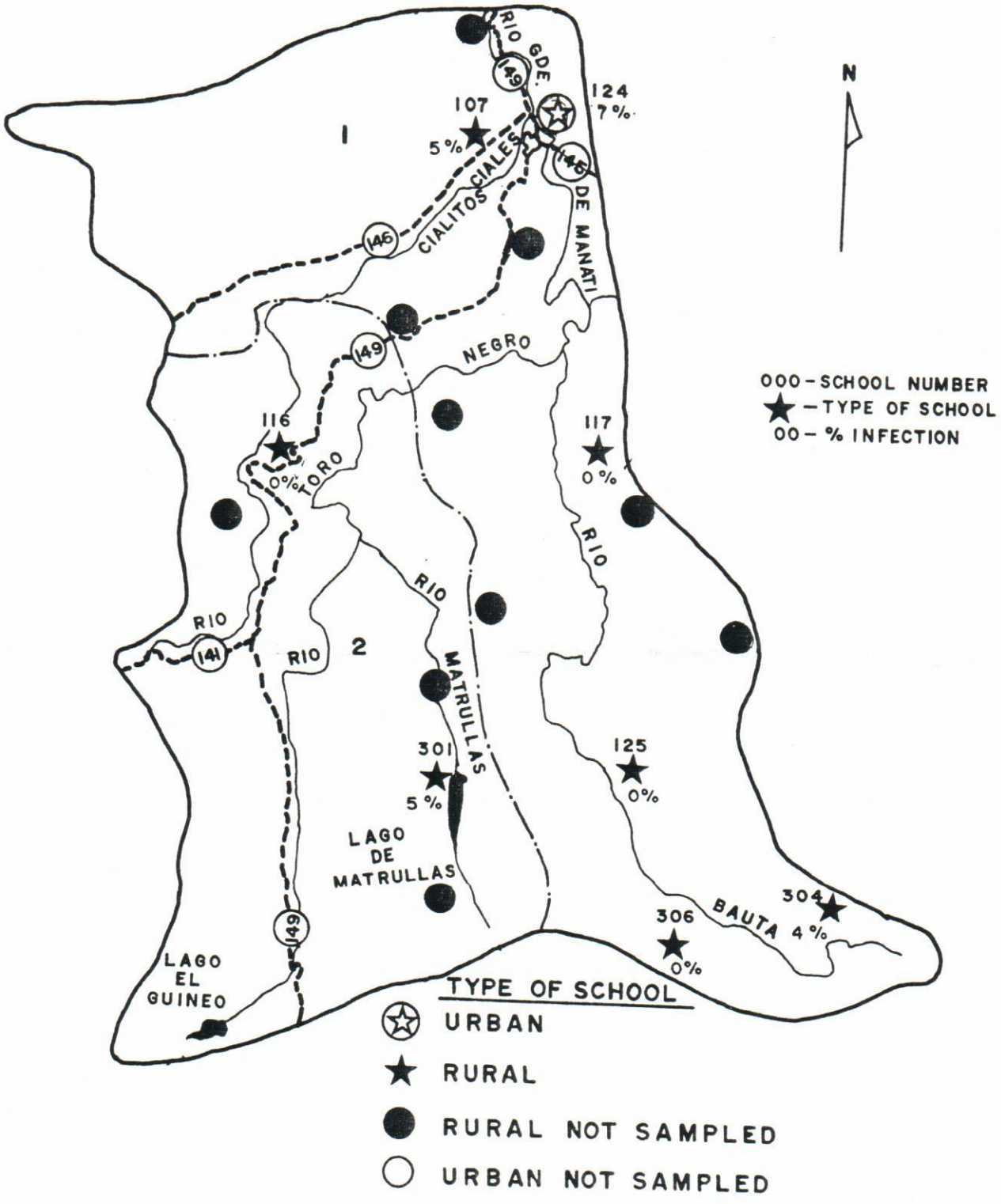


TABLE 17. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 17

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	111901124-1	18	0	0.0	0.7
1	111901124-2	26	3	11.5	0.7
	TOTAL	44	3	6.8	0.7
	RURAL				
1	111902107-1	22	1	4.5	0.7
1	115002117-1	36	0	0.0	0.6
1	115302125-1	12	0	0.0	0.6
1	115302304-1	25	1	4.0	0.5
1	115302306-1	35	0	0.0	0.5
2	111902116-1	14	0	0.0	0.8
2	115302301-1	22	1	4.5	0.6
	TOTAL	166	3	1.8	0.6
	GRAND-TOTAL	210	6	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

TOA ALTA, NARANJITO

MAP 18, AREA NO. 18

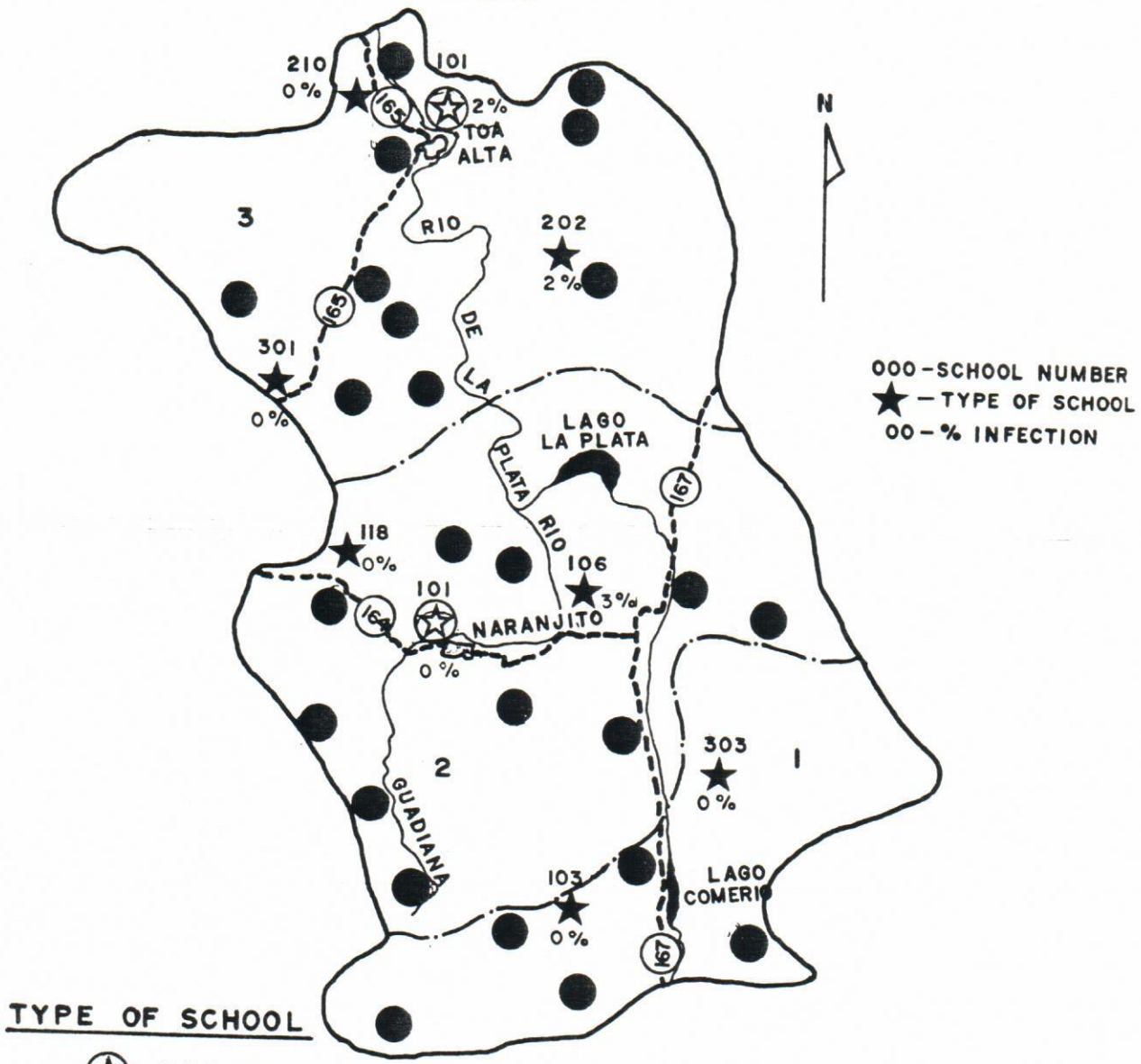


TABLE 18. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 18

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	125201101-1	21	0	0.0	0.4
2	125201101-2	29	0	0.0	0.5
3	166801101-1	32	0	0.0	0.5
3	166801101-2	32	1	3.1	0.5
	TOTAL	114	1	0.9	0.5
	RURAL				
1	122202103-1	4	0	0.0	0.5
1	161122303-1	20	0	0.0	0.5
2	125202106-1	40	1	2.5	0.6
2	125202118-1	28	0	0.0	0.5
3	125202210-1	30	0	0.0	0.4
3	166802202-1	20	1	5.0	0.6
3	166802202-2	27	0	0.0	0.6
3	166802301-1	18	0	0.0	0.5
	TOTAL	187	2	1.1	0.5
	GRAND-TOTAL	301	3	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

DORADO, TOA BAJA, VEGA BAJA, VEGA ALTA COROZAL, MOROVIS

MAP 19, AREA NO. 19

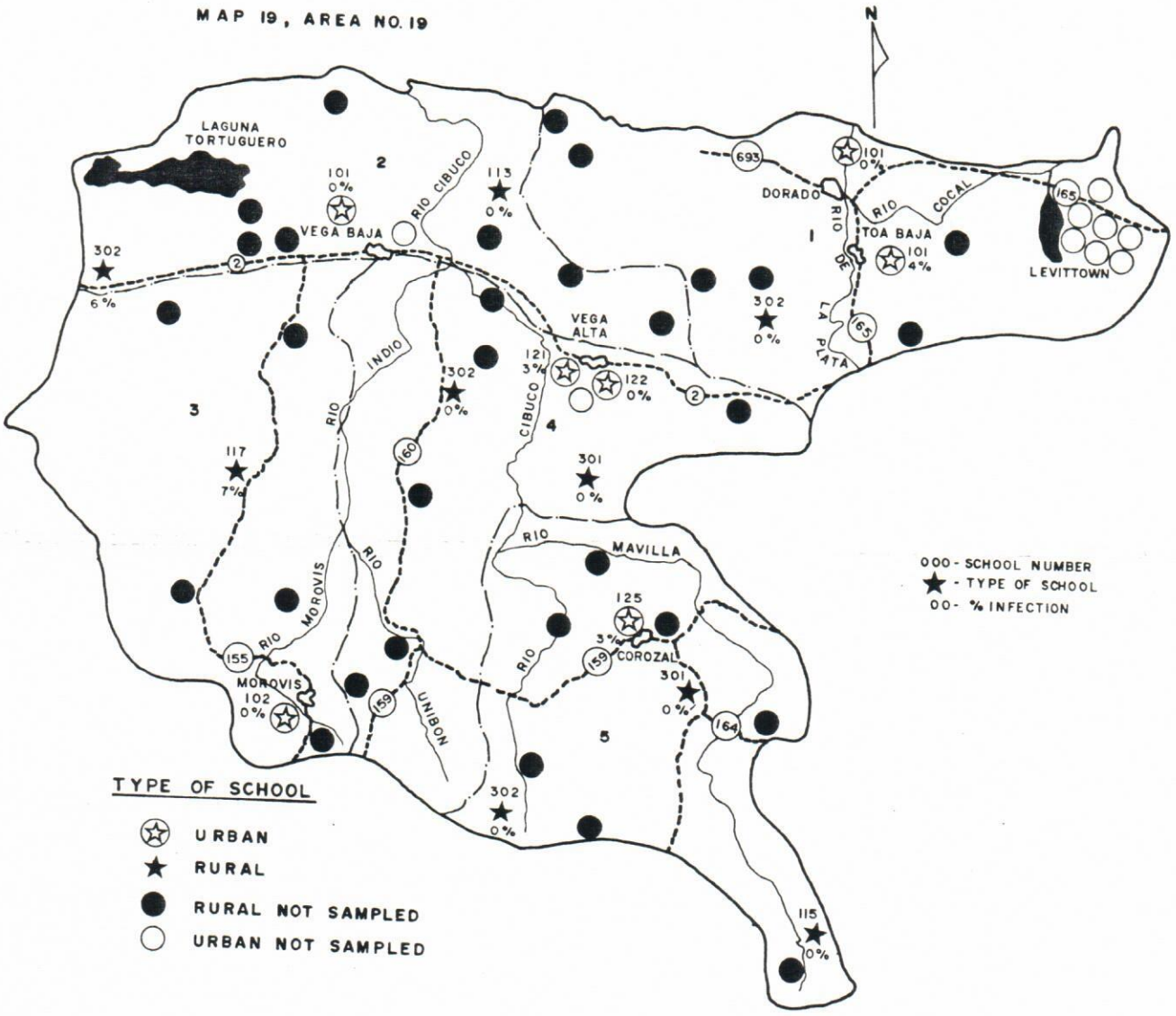


TABLE 19. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 19

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	102501101-1	29	0	0.0	0.5
1	106901101-1	26	1	3.8	0.6
2	117301101-1	27	0	0.0	0.6
3	115001102-1	34	0	0.0	0.6
4	117201121-1	34	1	2.9	0.5
4	117201122-1	29	0	0.0	0.6
5	102301125-1	32	1	3.1	0.5
	TOTAL	211	3	1.4	0.6
	RURAL				
1	102502302-1	23	0	0.0	0.4
2	114502302-1	32	2	6.3	0.7
2	117302115-1	26	0	0.0	0.6
3	117302117-1	15	1	6.7	0.8
4	117202301-1	20	0	0.0	0.6
4	117302302-1	26	0	0.0	0.5
5	102202115-1	26	0	0.0	0.5
5	102302301-1	25	0	0.0	0.5
5	102302302-1	27	0	0.0	0.6
	TOTAL	220	3	1.4	0.6
	GRAND-TOTAL	431	6	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

BARCELONETA, MANATI

MAP 20, AREA NO. 20

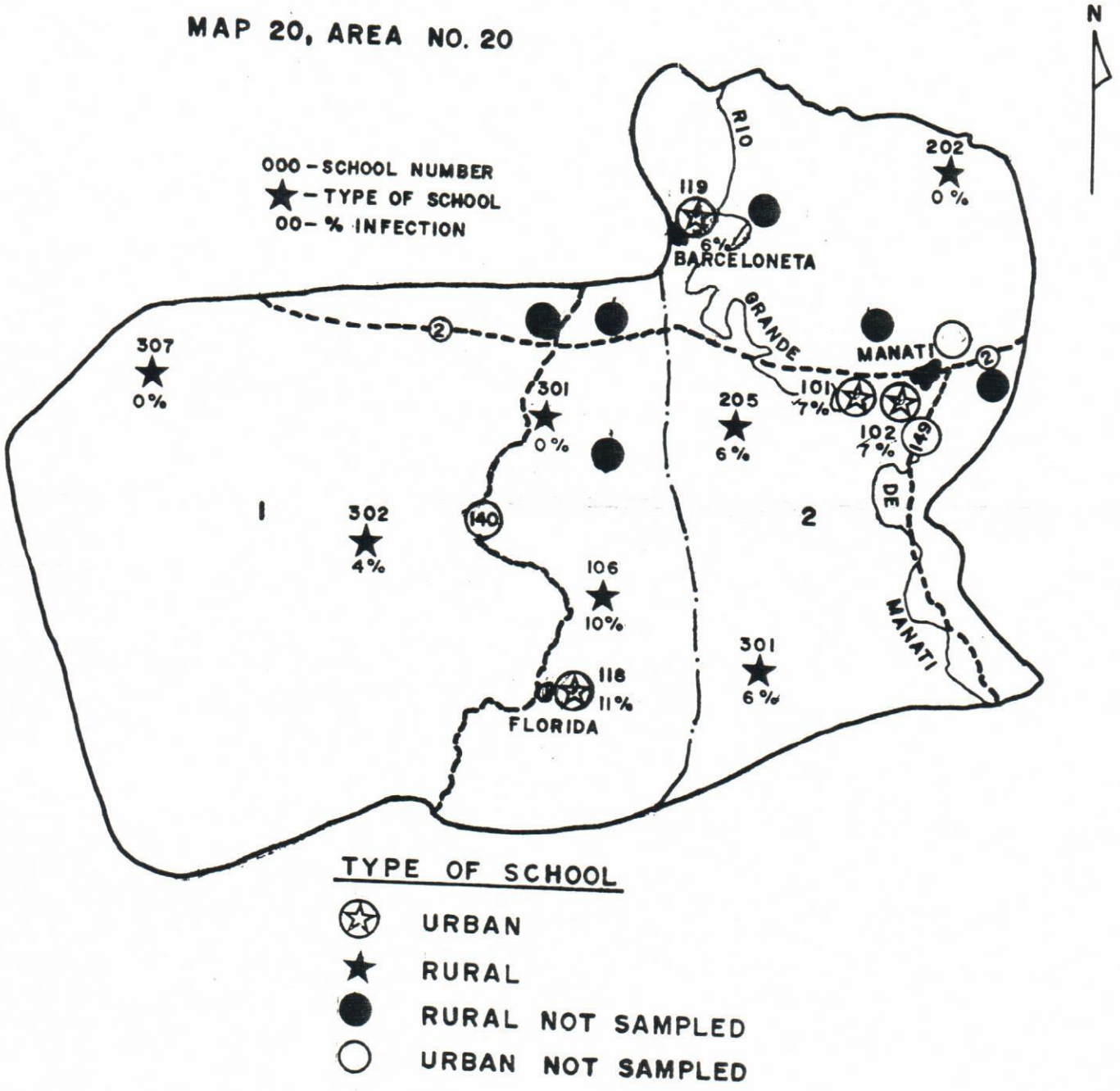


TABLE 20. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

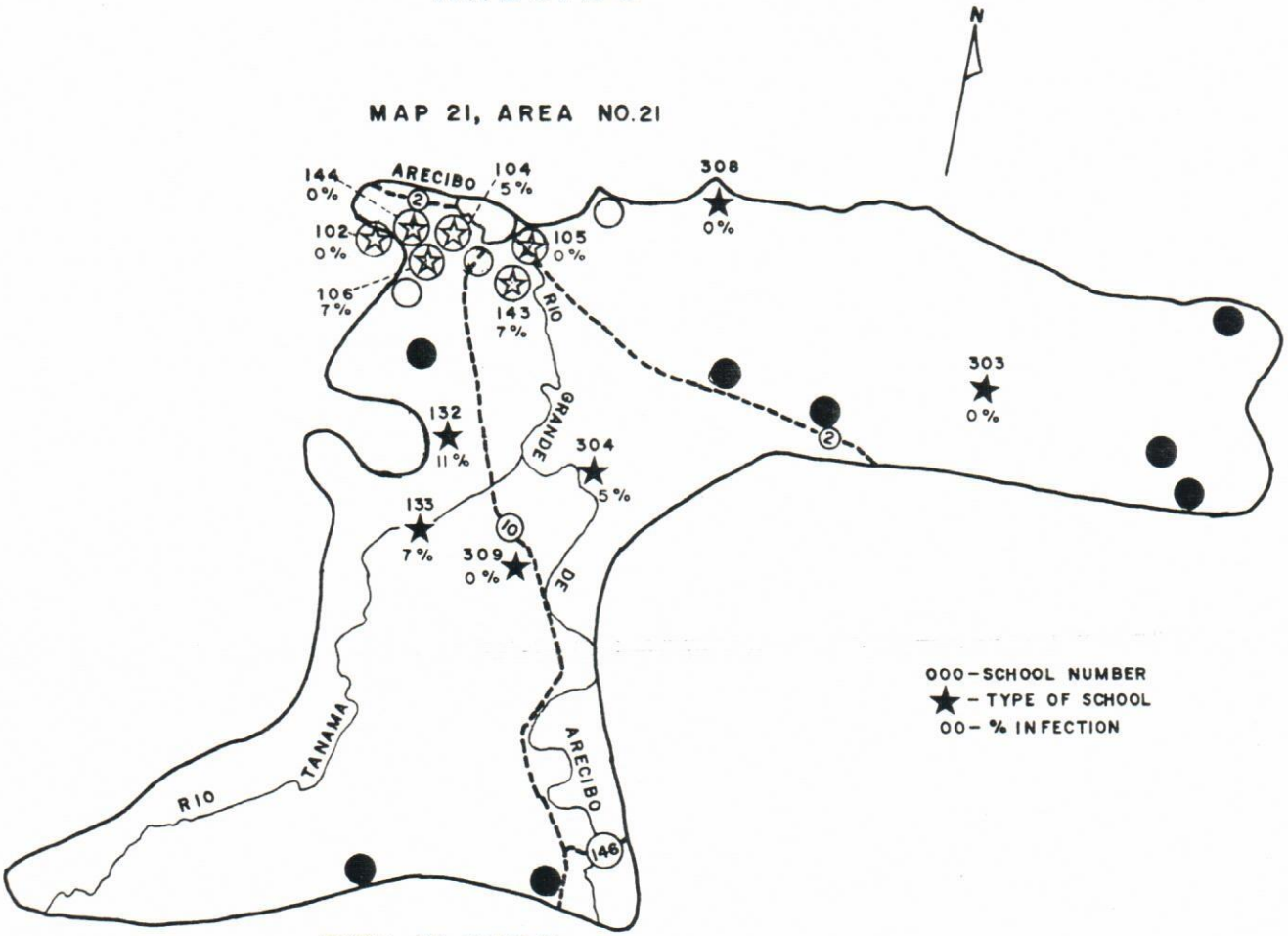
WATERSHED AREA 20

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	110911113-1	19	2	10.5	0.7
2	110901119-1	28	3	10.7	0.7
2	110901119-2	19	0	0.0	0.4
2	114501101-1	23	2	8.7	0.7
2	114501101-2	22	1	4.5	0.7
2	114501102-1	28	2	7.1	0.7
	TOTAL	139	10	7.2	0.7
	RURAL				
1	110702302-1	26	1	3.8	0.6
1	110702307-1	21	0	0.0	0.7
1	110902301-1	18	0	0.0	0.7
1	110912106-1	20	2	10.0	0.8
2	114502202-1	27	0	0.0	0.7
2	114502205-1	18	1	5.6	0.8
2	114502301-1	35	2	5.7	0.8
	TOTAL	165	6	3.6	0.7
	GRAND-TOTAL	304	16	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

ARECIBO

MAP 21, AREA NO.21



TYPE OF SCHOOL

- URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 21. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 21

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	110701102-1	24	0	0.0	0.7
1	110701104-1	20	1	5.0	0.8
1	110701105-1	32	0	0.0	0.6
1	110701106-1	27	2	7.4	0.6
1	110701143-1	29	2	6.9	0.7
1	110701144-1	11	0	0.0	0.5
	TOTAL	143	5	3.5	0.7
	RURAL				
1	110702132-1	28	3	10.7	0.8
1	110702133-1	15	1	6.7	0.7
1	110702303-1	27	0	0.0	0.7
1	110702304-1	21	1	4.8	0.7
1	110702308-1	16	0	0.0	0.7
1	110702309-1	22	0	0.0	0.7
	TOTAL	129	5	3.9	0.7
	GRAND-TOTAL	272	10	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

UTUADO, JAYUYA, ADJUNTAS

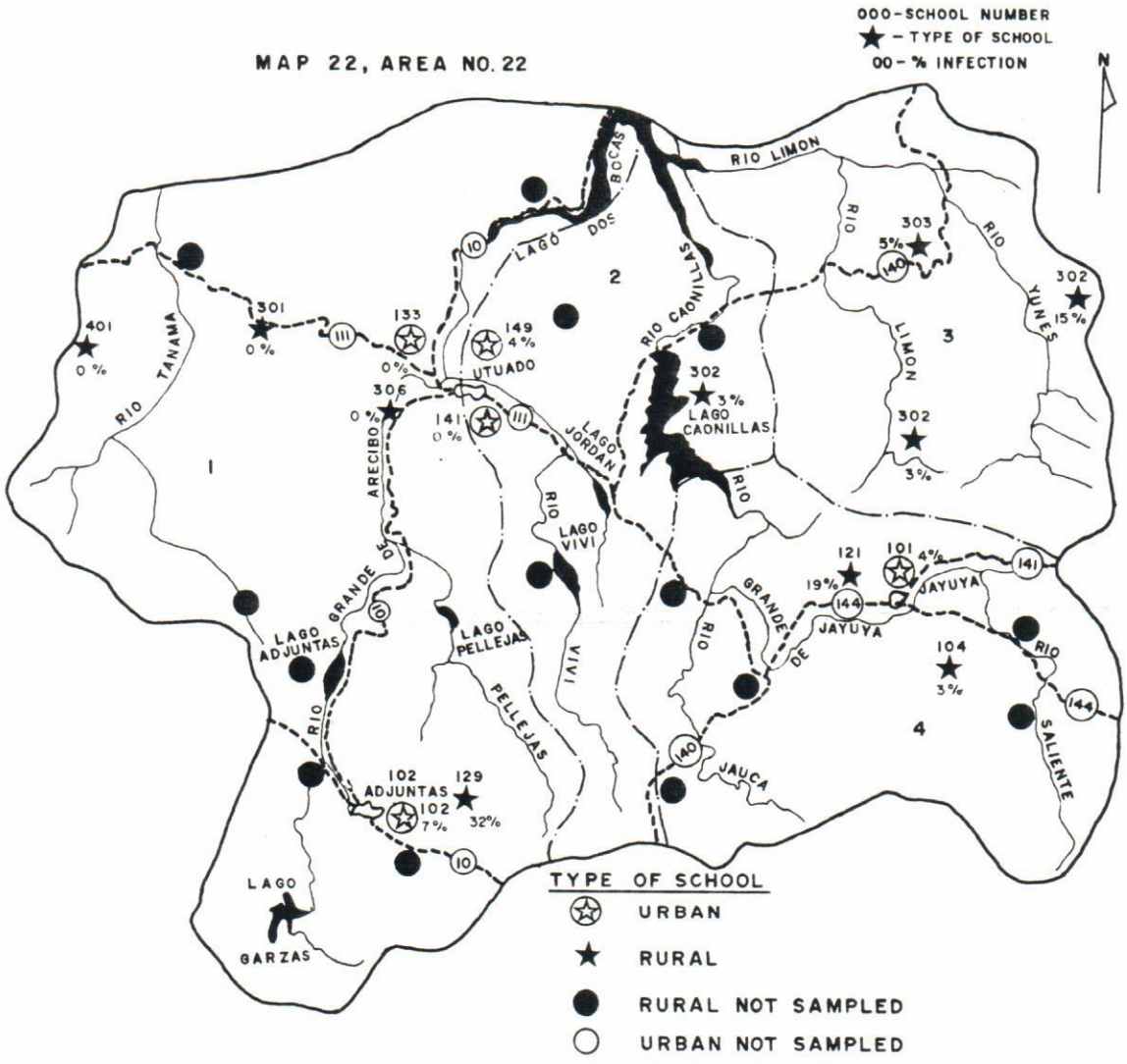


TABLE 22. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 22

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	117101133-1	32	0	0.0	0.4
1	150101102-1	28	2	7.1	0.7
2	117101141-1	20	0	0.0	0.5
2	117101149-1	28	2	7.1	0.6
2	117101149-2	25	0	0.0	0.6
4	153601101-1	29	1	3.4	0.5
4	153601101-2	25	1	4.0	0.5
	TOTAL	187	6	3.2	0.5
	RURAL				
1	117102301-1	33	0	0.0	0.5
1	117102306-1	24	0	0.0	0.6
1	117102306-2	15	0	0.0	0.5
1	117102401-1	22	0	0.0	0.5
1	150102129-1	22	7	31.8	0.8
2	117102302-1	31	1	3.2	0.7
3	117902302-1	20	3	15.0	0.7
3	117102303-1	22	1	4.5	0.6
3	153602302-1	34	1	2.9	0.5
4	153602104-1	32	1	3.1	0.6
4	153602121-1	26	5	19.2	0.8
	TOTAL	281	19	6.8	0.6
	GRAND-TOTAL	468	25	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

PONCE

MAP 23, AREA NO. 23

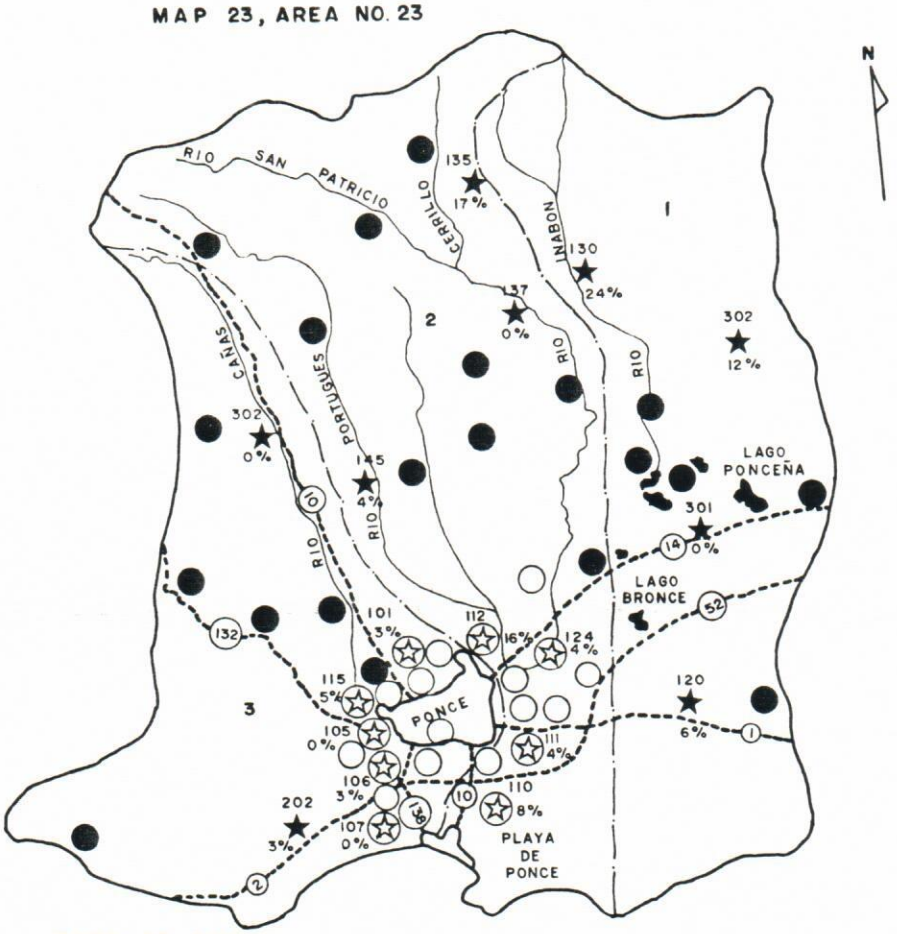


TABLE 23. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 23

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	155001110-1	25	2	8.0	0.6
2	155001111-1	25	1	4.0	0.6
2	155001112-1	32	5	15.6	0.7
2	155001124-1	27	1	3.7	0.6
3	155011101-1	31	1	3.2	0.7
3	155011105-1	31	0	0.0	0.7
3	155011106-1	29	1	3.4	0.6
3	155011107-1	26	0	0.0	0.6
3	155011115-1	20	1	5.0	0.6
	TOTAL	246	12	4.9	0.7
	RURAL				
1	155702302-1	33	4	12.1	0.7
1	155002120-1	32	2	6.3	0.6
1	155002130-1	29	7	24.1	0.8
1	155002301-1	28	0	0.0	0.5
2	155002135-1	6	1	16.7	0.7
2	155002137-1	12	0	0.0	0.5
2	155012145-1	28	1	3.6	0.6
3	155012202-1	32	1	3.1	0.6
3	155012302-1	15	0	0.0	0.7
	TOTAL	215	16	7.4	0.6
	GRAND-TOTAL	461	28	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

YAUCO, GUAYANILLA, PEÑUELAS

MAP 24, AREA NO. 24

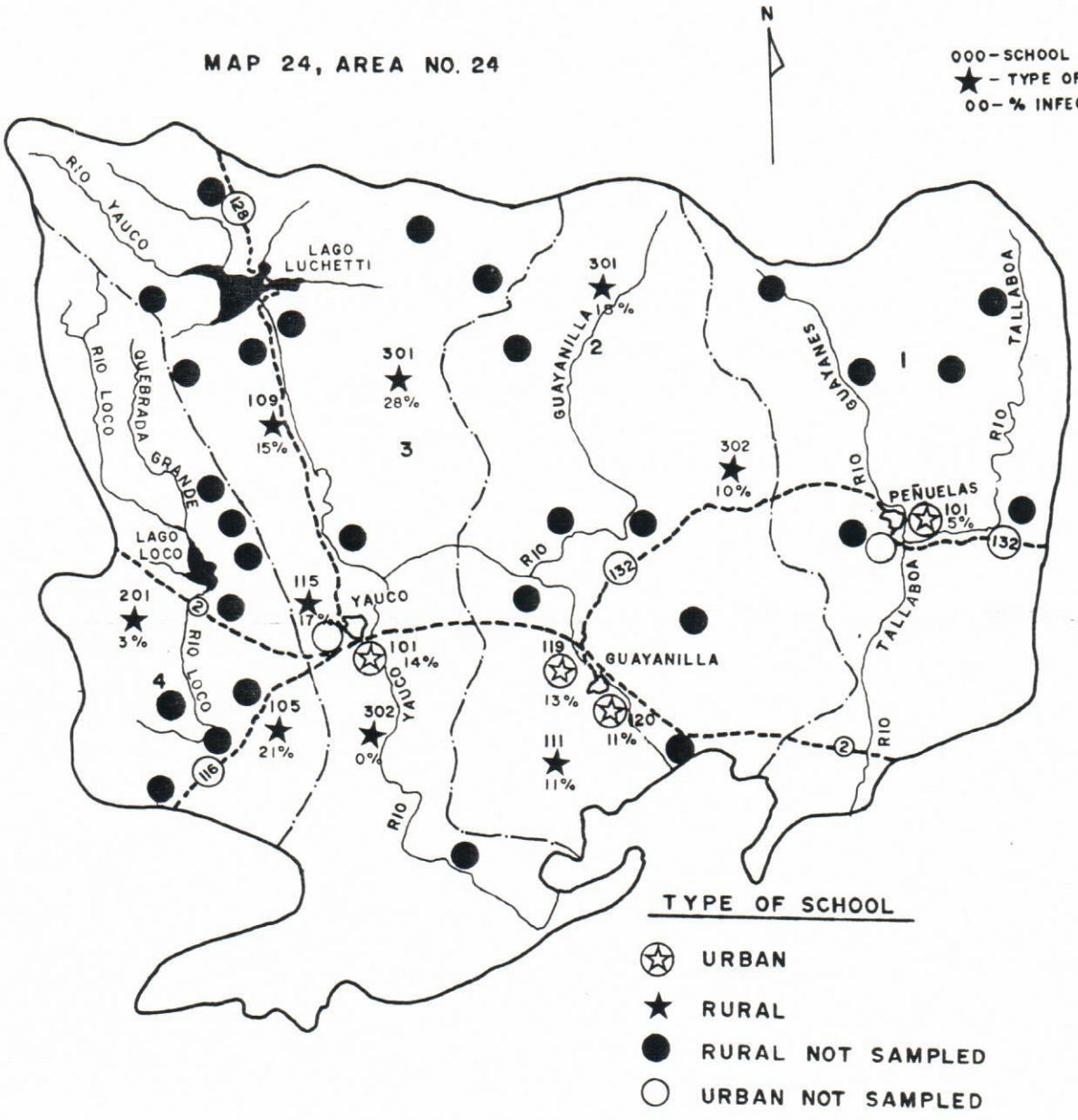


TABLE 24. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 24

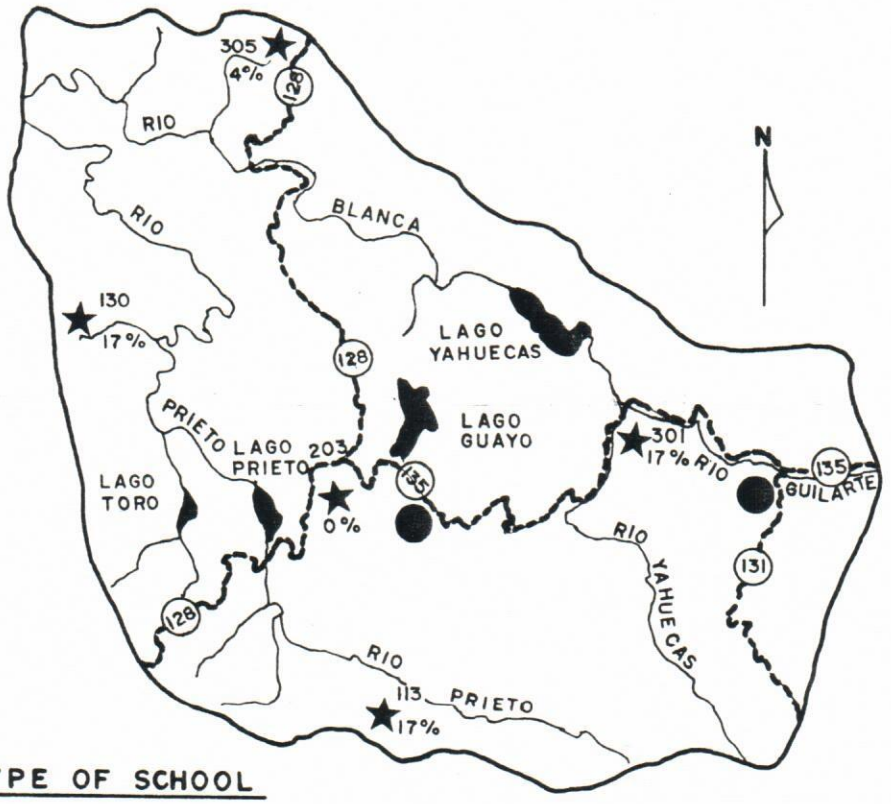
STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	15550110[illegible]-1	19	2	10.5	0.8
1	15550110[illegible]-2	33	2	6.1	0.6
1	15550110[illegible]-3	23	0	0.0	0.7
2	15290111[illegible]-1	30	4	13.3	0.7
2	15290112[illegible]-1	27	3	11.1	0.7
2	15290112[illegible]-2	28	3	10.7	0.8
3	15770110[illegible]-1	35	6	17.1	0.8
3	15770110[illegible]-2	21	2	9.5	0.7
	TOTAL	216	22	10.2	0.7
	RURAL				
2	15290211[illegible]-1	35	4	11.4	0.8
2	15290230[illegible]-1	33	5	15.2	0.9
2	15550230[illegible]-1	21	2	9.5	0.7
3	15770210[illegible]-1	20	3	15.0	0.8
3	15770211[illegible]-1	36	6	16.7	0.8
3	15770230[illegible]-1	39	11	28.2	0.8
3	15770230[illegible]-1	28	0	0.0	0.7
4	14610220[illegible]-1	32	1	3.1	0.5
4	15770210[illegible]-1	34	7	20.6	0.9
	TOTAL	278	39	14.0	0.7
	RURAL				
	GRAND-TOTAL	494	61	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

UPPER YAUCO, CASTAÑER

MAP 25, AREA NO. 25

000 - SCHOOL NUMBER
★ - TYPE OF SCHOOL
00 - % INFECTION



TYPE OF SCHOOL

- ☆ URBAN
- ★ RURAL
- ● RURAL NOT SAMPLED
- ○ URBAN NOT SAMPLED

TABLE 25. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 25

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	RURAL				
1	114002130-1	6	1	16.7	0.8
1	114002303-1	19	0	0.0	0.7
1	114002305-1	27	1	3.7	0.7
1	150102301-1	23	4	17.4	0.8
1	157702113-1	23	4	17.4	0.7
	TOTAL	98	10	10.2	0.7
	GRAND-TOTAL	98	10	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

AGUADILLA, RINCÓN, LARES, HATILLO, MOCA, AGUADA, ISABELA, QUEBRADILLAS, SAN SEBASTIAN, CAMUY

MAP 26, AREA NO. 26

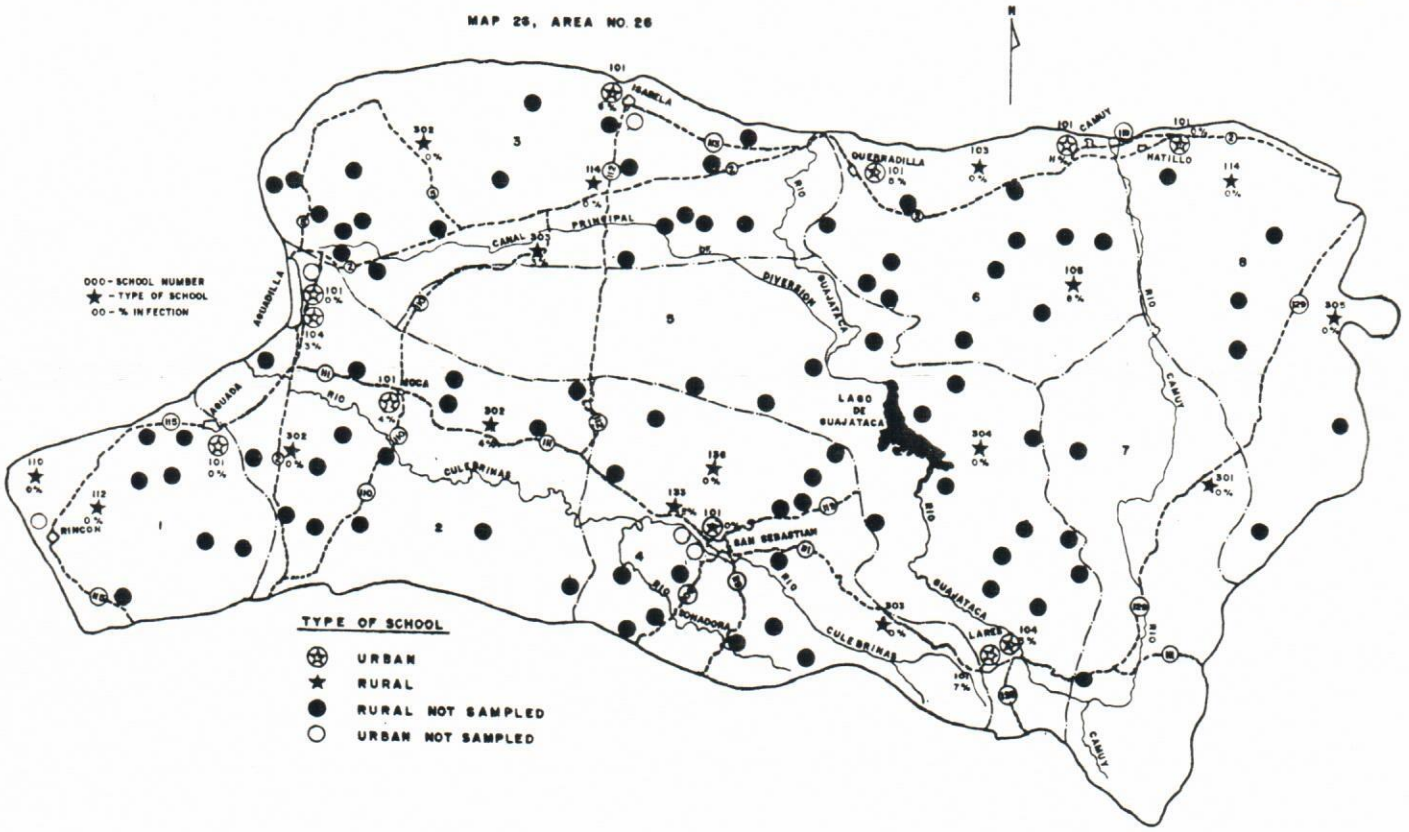


TABLE 26. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 26

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	140201101-1	28	0	0.0	0.4
2	140301101-1	26	0	0.0	0.5
2	140301104-1	34	1	2.9	0.5
2	144901101-1	26	1	3.8	0.5
3	143501101-1	35	4	11.4	0.7
3	143501101-2	35	0	0.0	0.5
4	146601101-1	21	0	0.0	0.4
5	114001101-1	28	2	7.1	0.7
5	114001104-1	21	1	4.8	0.7
6	111401101-1	19	2	10.5	0.8
6	115701101-1	22	1	4.5	0.7
8	113201101-1	29	0	0.0	0.6
	TOTAL	324	12	3.7	0.6
	RURAL				
1	145802110-1	25	0	0.0	0.4
1	145802112-1	26	0	0.0	0.4
2	140202302-1	34	0	0.0	0.5
2	144902302-1	25	1	4.0	0.6
3	140302302-1	30	0	0.0	0.4
3	143502114-1	23	0	0.0	0.5
3	144902303-1	36	1	2.8	0.5
4	146602133-1	19	1	5.3	0.5
4	146602136-1	14	0	0.0	0.4
4	146602303-1	20	0	0.0	0.4
5	111402304-1	31	0	0.0	0.6
6	111402103-1	24	0	0.0	0.5
6	111402105-1	26	2	7.7	0.7
7	113202301-1	33	0	0.0	0.7
8	115702305-1	24	0	0.0	0.7
8	113202114-1	31	0	0.0	0.7
	TOTAL	421	5	1.2	0.5
	GRAND-TOTAL	745	17	*	0.6

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

AÑASCO, LAS MARIAS

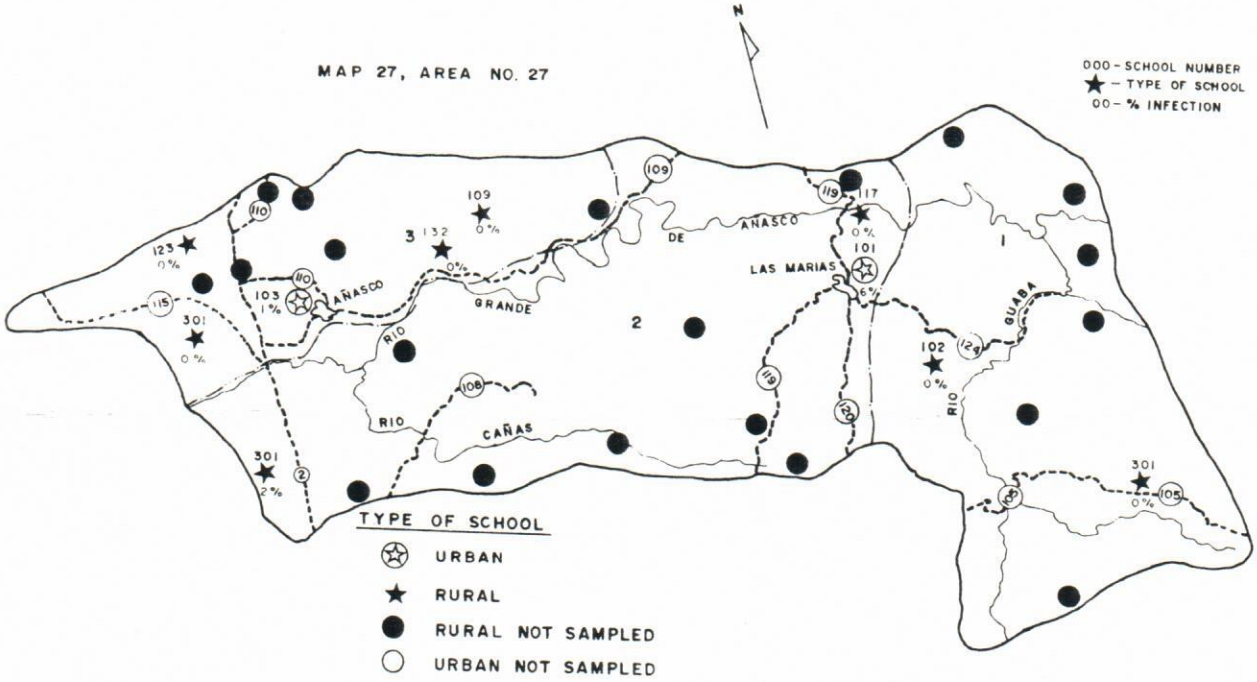


TABLE 27. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 27

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
2	144101101-1	34	2	5.9	0.5
3	140601103-1	40	0	0.0	0.4
3	140601103-2	30	1	3.3	0.4
3	140601103-3	29	0	0.0	0.6
	TOTAL	133	3	2.3	0.5
	RURAL				
1	144102102-1	8	0	0.0	0.5
1	144602301-1	30	0	0.0	0.4
2	144102117-1	11	0	0.0	0.5
2	144802301-1	25	1	4.0	0.6
2	144302301-2	25	0	0.0	0.4
3	140602109-1	13	0	0.0	0.6
3	140602123-1	30	0	0.0	0.5
3	140602132-1	23	0	0.0	0.4
3	140602132-2	22	0	0.0	0.4
3	140602301-1	34	0	0.0	0.6
	TOTAL	221	1	0.5	0.5
	GRAND-TOTAL	354	4	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

MAYAGÜEZ

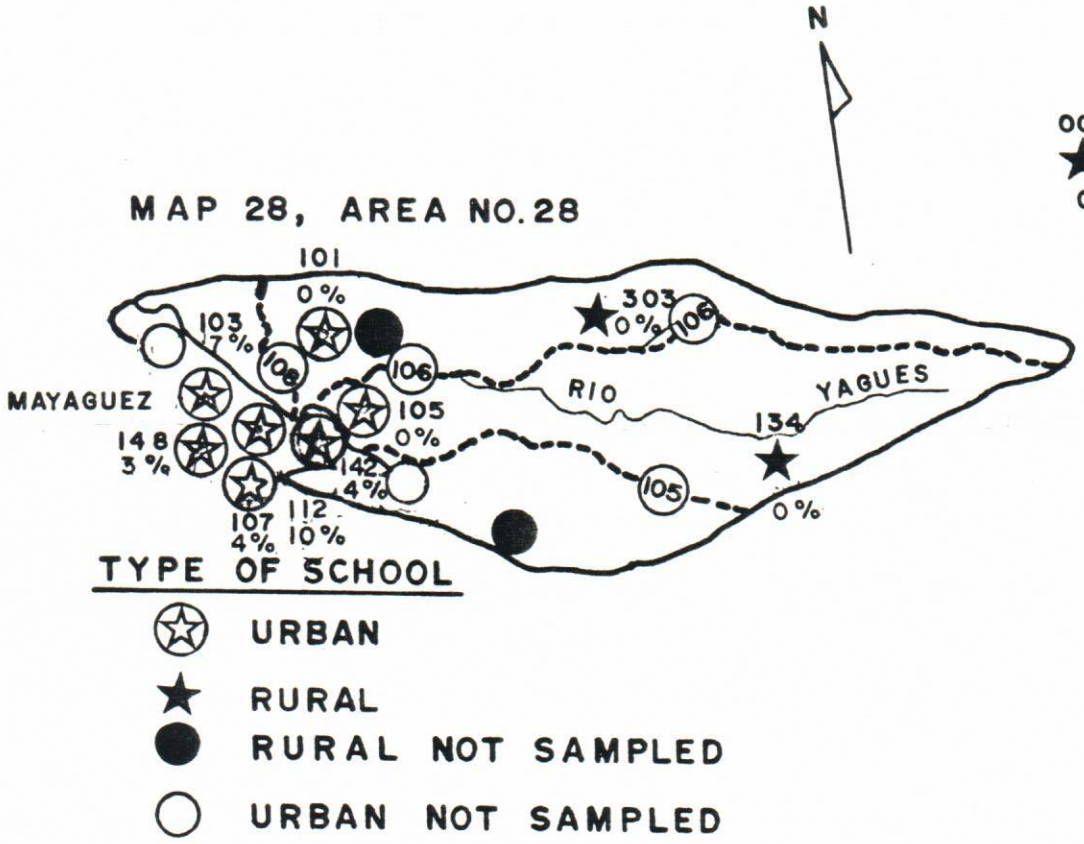

N
000 – SCHOOL NUMBER
★ – TYPE OF SCHOOL
00 – % INFECTION
MAP 28, AREA NO. 28
101
0%
103
7%
108
106
303
0%
106
RIO
YAGUES
MAYAGUEZ
105
0%
148
3%
142
4%
134
105
0%
107
4%
112
10%
TYPE OF SCHOOL
URBAN
RURAL
RURAL NOT SAMPLED
URBAN NOT SAMPLED

TABLE 28. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 28

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTICIPATION AREA
	URBAN				
1	14480110 1-1	29	0	0.0	0.5
1	14480110 3-1	28	2	7.1	0.5
1	14480110 5-1	21	0	0.0	0.4
1	14480110 7-1	27	1	3.7	0.6
1	14480111 2-1	29	3	10.3	0.6
1	14480114 2-1	28	1	3.6	0.5
1	14480114 8-1	29	1	3.4	0.6
	TOTAL	191	8	4.2	0.5
	RURAL				
1	14480213 4-1	27	0	0.0	0.5
1	14480230 3-1	21	0	0.0	0.3
1	14480230 3-2	21	0	0.0	0.4
	TOTAL	69	0	0.0	0.4
	GRAND-TOTAL	260	8	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

HORMIGUEROS, CABO ROJO, SAN GERMAN, MARICAO
SABANA GRANDE

MAP 29, AREA NO. 29

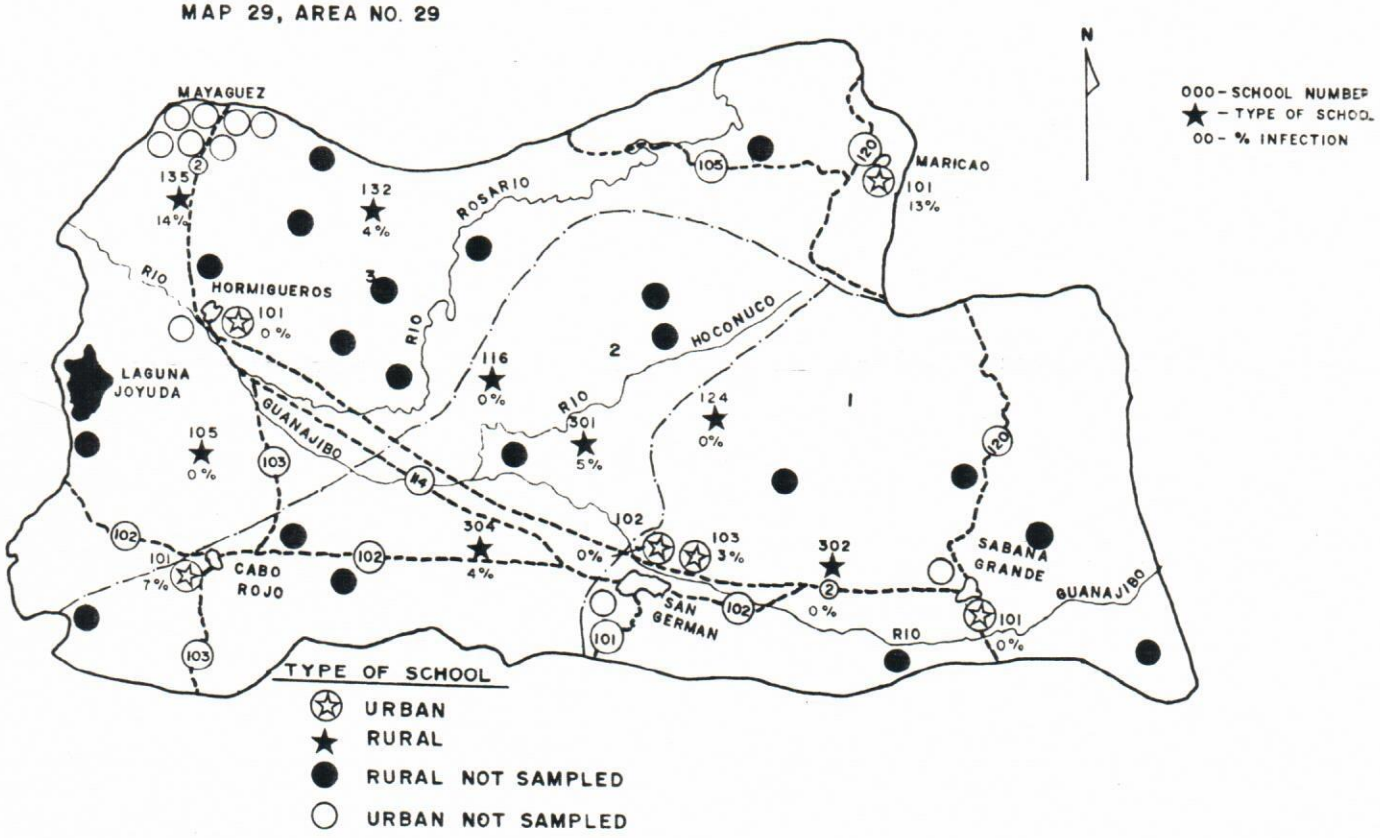


TABLE 29. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 29

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	14610101-1	30	0	0.0	0.4
1	14630102-1	35	0	0.0	0.4
1	14630103-1	29	1	3.4	0.5
2	14620101-1	30	2	6.7	0.5
3	14330101-1	32	0	0.0	0.5
3	14460101-1	24	3	12.5	0.6
	TOTAL	180	6	3.3	0.5
	RURAL				
1	14630202-1	11	0	0.0	0.5
1	14630230Z-1	32	0	0.0	0.4
2	14630211G-1	28	0	0.0	0.5
2	14630230I-1	22	1	4.5	0.5
2	14630230+-1	26	0	0.0	0.4
2	14630230+-2	28	2	7.1	0.5
3	14620210S-1	32	0	0.0	0.4
3	14480213Z-1	25	1	4.0	0.5
3	14480213S-1	29	4	13.8	0.7
	TOTAL	233	8	3.4	0.5
	GRAND-TOTAL	413	14	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

LAJAS, ENSENADA, GUANICA

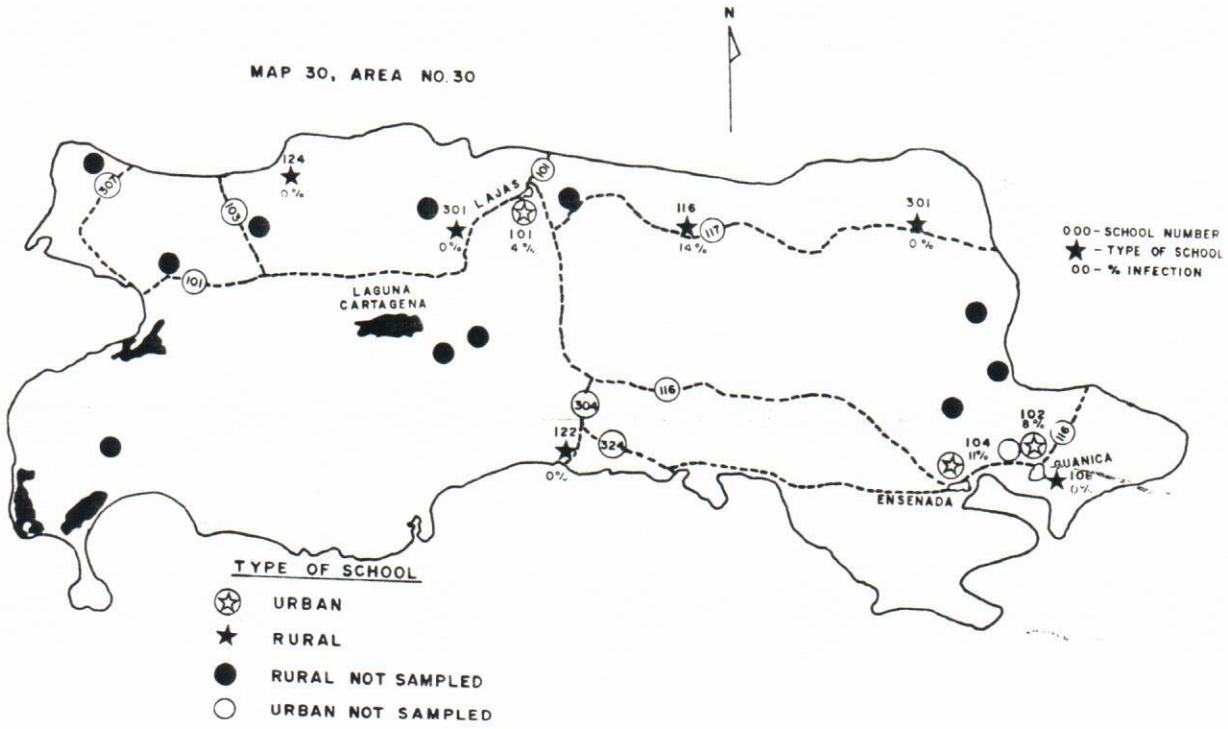


TABLE 30. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 30

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	143901101-1	28	1	3.6	0.5
1	152701102-1	23	2	8.7	0.6
1	152701102-2	26	2	7.7	0.7
1	152701104-1	17	2	11.8	0.7
1	152701104-2	27	3	11.1	0.7
	TOTAL	121	10	8.3	0.6
	RURAL				
1	141202124-1	19	0	0.0	0.5
1	143902116-1	29	4	13.8	0.6
1	143902122-1	30	0	0.0	0.5
1	143902301-1	31	0	0.0	0.5
1	146102301-1	37	0	0.0	0.4
1	152702106-1	22	0	0.0	0.6
	TOTAL	168	4	2.4	0.5
	GRAND-TOTAL	289	14	*	0.5

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

VIEQUES

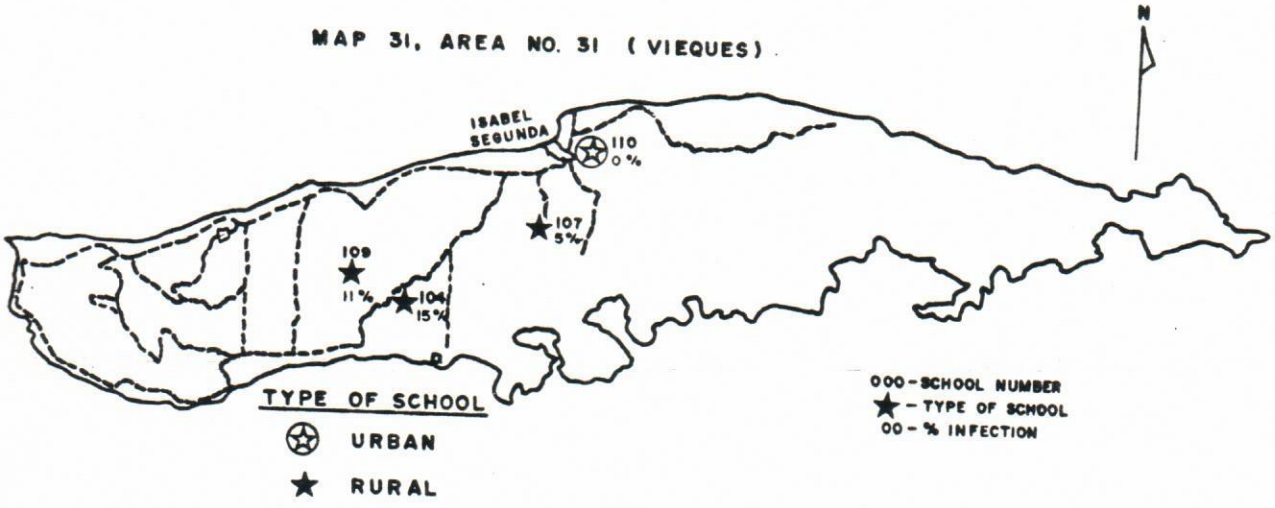

MAP 31, AREA NO. 31 (VIEQUES)
N
ISABEL SEGUNDA
110
0 %
107
5%
109
11 %
104
15 %
TYPE OF SCHOOL
URBAN
RURAL
000 - SCHOOL NUMBER
★ - TYPE OF SCHOOL
00 - % INFECTION

TABLE 31. DISTRIBUTION OF POSITIVE SKIN TEST REACTORS BY INDIVIDUAL SAMPLE CLASSROOMS.

WATERSHED AREA 31

STRATUM	SCHOOL-CODE	NUMBER TESTED	NUMBER POSITIVE	RATE PER 100	AVERAGE ANTIGEN AREA
	URBAN				
1	137401110-1	28	0	0.0	0.6
	TOTAL	28	0	0.0	0.6
	RURAL				
1	137402104-1	26	4	15.4	0.8
1	137402107-1	38	2	5.3	0.7
1	137402109-1	37	4	10.8	0.8
	TOTAL	101	10	9.9	0.7
	GRAND-TOTAL	129	10	*	0.7

*Total not calculated because of unequal sampling ratios, or because numbers were too small.

SUMMARY

SKIN TEST DATA FOR SURVEYS OF 1963, 1969 AND 1976

BY SCHOOL, ARRANGED BY WATERSHED

This summary correlates the number of positive skin-test reactors and children tested for each of the three surveys, including the code numbers for the school. The number reported as positive is according to the definition of that particular year.

SKIN TEST DATA FOR 1963, 1969 & 1976
BY WATER SHEDS.

SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED (Urban or R) STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
HUMACAO (3)	1 - CEIBA	1181101	1318101	131801101-1	1-1(U)	2	1	3	29	24	37
	1 - FAJARDO	1261101	132601101	132601101-1	1-3(U)	4	7	1	35	29	29
	1 - FAJARDO	1261103	132601103	132601103-1	1-3(U)	0	3	5	25	28	35
	1 - FAJARDO	1261104	132601104	132601104-1	1-3(U)	0	2	1	18	14	31
	1 - FAJARDO	1261113	132601113	132601113-1	1-3(U)	3	2	1	28	28	21
	1 - CEIBA	1182106R	NOT DONE	SUBSTITUTE 131801101-2	1-1(R)(U)	4	ESTIMATE 4	1	9	ESTIM. 16	35
	1 - CEIBA	1182102	131802102	131802201-1	1-1(R)	8	4	1	22	24	25
	1 - FAJARDO	1262106	132602106	132602106-1	1-2(R)	3	1	1	15	14	14
	1 - CEIBA	1182104	131802104	131822202-1	1-3(R)	8	5	7	23	17	29
	1 - FAJARDO	1262110	132602110	132602110-1	1-3(R)	5	3	5	13	12	16
HUMACAO (3)	2 - LUQUILLO	1441101	134401101	134401101-1	2-1(U)	8	1	14	30	38	42
	2 - RIO GRANDE	1591101-1	135901101-1	135901101-1	2-2(U)	11	9	6	34	89	31
	2 - RIO GRANDE	1591101-2	135901101-2	135901101-2	2-2(U)	1		6	30		31
	2 - LUQUILLO	1442104	134402104	134402104-1	2-1(R)	12	2	3	26	13	24
	2 - LUQUILLO	1442110	134402110	134402110-1	2-1(R)	7	1	6	19	14	35
	2 - Rio Gde.	1592301	135902301-1	135902301-1	2-1(R)	4	14	1	20	69	28
	2 - Rio Gde.	—	135902301-2		2-1(R)	—			—		
	2 - Rio Gde.	1592110	135902109	135902109-1	2-2(R)	2	5	4	9	16	32
	2 - Rio Gde.	1592116	135902116	135902116-1	2-2(R)	13	4	5	28	23	30
	2 - Rio Gde.	1592201	135902122	135902122-1	2-2(R)	8	4	4	16	30	30
	2 - Rio Gde.	1592103	135902103	135902203-1	2-2(R)	11	6	1	18	49	27
HUMACAO (3)	3 - NAGUABO	1511102-1	135101102-1	135101102-1	3-2(U)	8	11	1	41	69	21
	3 - NAGUABO	1511102-2	135101102-2	135101102-2	3-2(U)	17		8	37		26
	3 - CEIBA	1182103	131802103	131802103-1	3-1(R)	5	1	1	18	11	13
	3 - NAGUABO	1512301	135102301	135102301-1	3-1(R)	18	2	3	36	20	14
	3 - NAGUABO	—	135102105		3-2(R)	—	6		—	16	
	3 - NAGUABO	1512109	135102109	135102109-1	3-2(R)	3	3	1	30	25	27
	3 - NAGUABO	1512110		135102109-2	3-2(R)	1	1	1	7	11	19
	3 - NAGUABO	1512113	135102113	135102113-1	3-2(R)	7	1	0	23	20	16
	3 - NAGUABO	1512302	135102302	135102402-1	3-2(R)	12	5	0	26	26	14
	3 - NAGUABO	—	135102303		3-1(R)	—	1		—	22	

SKIN TEST DATA FOR 1963, 1969 & 1976 BY WATER SHEDS.

CONTINUES FROM PG. 1

SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED URBAN OR RURAL STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
CAGUAS (2)	4-TRUJILLO ALTO	1701101	127001101	127001101-1	4-1 (U)	3	3	7	35	25	38
SAN JUAN (6)	4-CAROLINA	1151101-1	161501101	161501101-1	4-2 (U)	2	5	5	26	20	29
" " "	4-CAROLINA	1151101-2	161501102	161501101-2	4-2 (U)	4	6	7	28	29	29
HUMACAO (3)	4-CANOVANAS	1431101	134301101	134301101-1	4-3 (U)	3	2	7	30	36	27
" "	4-LOIZA	—	134311102		4-3 (U)	—	7		—	20	
CAGUAS (2)	4-TRUJILLO ALTO	1702112	127002102	127002111-1	4-1 (R)	5	1	1	15	24	26
" "	4-TRUJILLO ALTO	1702302	127002302	127002302-1	4-1 (R)	2	2	0	25	22	23
SAN JUAN (6)	4-CAROLINA	1152111	161502302	161502106-1	4-2 (R)	4	3	24	20	26	46
" " "	4-CAROLINA	1152120	161502120	161502120-1	4-2 (R)	2	0	6	23	9	28
HUMACAO (3)	4-CANOVANAS	1432103	134302103	134302103-1	4-3 (R)	4	6	5	24	40	25
HUMACAO (3)	4-CANOVANAS	1432105	134302205	134302105-1	4-3 (R)	1	5	5	47	34	32
" "	4-LOIZA	1432302	134312107	134312130-1	4-3 (R)	0	2	0	36	29	30
HUMACAO (3)	5-JUNCOS	1381102	133801101-1	133801101-1	5-1 (U)	8	22	6	41	59	28
" "	5-JUNCOS	1381103	133801101-2	133801101-2	5-1 (U)	17		3	28		31
" "	5-LAS PIEDRAS	1421101-1	134201121-1	134201121-1	5-1 (U)	13	5	3	41	44	22
" "	5-LAS PIEDRAS	1421101-2	134201121-2	134201121-2	5-1 (U)	24		6	43		30
CAGUAS (2)	5-GURABO	1311101	123101101	123101101-1	5-3 (U)	8	7	1	35	52	41
HUMACAO (3)	5-JUNCOS	1382113	133802113	133802113-1	5-1 (R)	6	4	4	25	21	27
" "	5-JUNCOS	1382301	133802301	133802301-1	5-1 (R)	2	8	7	24	30	30
" "	5-JUNCOS	1382114	133802114	133802202-1	5-2 (R)	10	18	3	26	54	21
" "	5-LOS PIEDRAS	1422116	134202116	134202202-1	5-2 (R)	14	11	1	33	43	25
CAGUAS (2)	5-GURABO	1312103	123102103	123102103-1	5-3 (R)	5	6	2	27	14	17
" "	5-GURABO	1312109	123102104	123102103-2	5-3 (R)	1	2	0	9	34	19
" "	5-GURABO	1312106	123102106	123102106-1	5-3 (R)	20	5	0	43	24	24

CONTINUES FROM Pg. 2.

SKIN TEST DATA FOR 1963, 1969 & 1976
BY WATER SHEDS.

SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED URBANVOCK STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
HUMACAO (3)	6-HUMACAO	1341103-1	133401103-1	133401103-1	6-2 (U)	6	15	2	34	59	31
" "	6-HUMACAO	1341103-2	133401103-2	133401103-2	6-2 (U)	8		4	43		26
" "	6-HUMACAO	1341102-1	133401102-1	133401129-1	6-2 (U)	5	15	2	35	50	26
" "	6-HUMACAO	1341102-2	133401102-2	133401129-2	6-2 (U)	8		4	32		29
" "	6-HUMACAO	—	133401127-1		6-2 (U)	—	2		—	14	
HUMACAO (3)	6-HUMACAO	1342301	133402301	133402301-1	6-1 (R)	1	4	3	40	25	28
" "	6-HUMACAO	1342302	133402302	133402302-1	6-1 (R)	19	0	0	30	16	25
" "	6-LAS PIEDRAS	1422113	134202113	134202113-1	6-2 (R)	3	10	3	23	23	31
" "	6-HUMACAO	1342106	133402106	133402106-1	6-2 (R)	7	19	7	25	36	31
" "	6-HUMACAO	1342109	133402109	133402109-1	6-2 (R)	16	5	1	37	24	23
" "	6-LAS PIEDRAS	1422201	134202123	134202205-1	6-2 (R)	3	2	3	27	29	32
" "	6-HUMACAO	—	133402129		6-2 (R)	—	2		—	21	
HUMACAO (3)	7-MAUNABO	1471101-1	134701101-1	134701101-1	7-1 (U)	3	13	2	25	57	29
" "	7-MAUNABO	1471101-2	134701101-2	134701101-2	7-1 (U)	9		0	28		22
" "	7-YABUCOA	1761101-1	137601101-1	137601102-1	7-2 (U)	9	40	2	35	102	31
" "	7-YABUCOA	1761101-2	137601101-2	137601102-2	7-2 (U)	13		5	35		31
HUMACAO (3)	7-MAUNABO	1472106	134702112	134701101-3	7-1 (R)(U)	4	3	2	12	18	21
HUMACAO (3)	7-MAUNABO	1472104	134702104	134702301-1	7-1 (R)	1	2	0	18	15	24
" "	7-YABUCOA	1762120	137602120	137602120-1	7-2 (R	13	6	1	43	24	18
" "	7-YABUCOA	1762307	137602307	137602307-1	7-2 (R)	4	2	1	35	30	17
" "	7-YABUCOA	1762105	137602105	137602105-1	7-3 (R)	2	6	0	26	26	19
" "	7-YABUCOA	1762302	137602302	137602302-1	7-3 (R)	12	4	1	34	25	36
" "	7-HUMACAO	1342113	133402113	133402201-1	7-4 (R)	18	18	3	43	63	29
" "	7-HUMACAO	—	133402304		7-4 (R)	—	9		—	23	

CONTINUES FROM pg. 3.

SKIN TEST DATA FOR 1963, 1969 & 1976
BY WATERSHEDS.

SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED URBANIZATION STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
CAGUAS (2)	8-SAN LORENZO	1651104	126501103	126501103-1	8-1 (U)	14	12	1	40	36	35
" "	8-CAGUAS	1131106	121301106	121301106-1	8-2 (U)	6	8	2	40	28	32
" "	8-CAGUAS	1131101	121301104	121301138-1	8-2 (U)	11	6	4	33	30	30
" "	8-CAGUAS	1131305	121301142	121301142-1	8-2 (U)	9	1	2	34	23	35
" "	8-CAGUAS	1131102	121301102	121301150-1	8-2 (U)	6	1	3	31	25	32
" "	8-AGUAS BUENAS	1041201	120401116	120401117-1	8-3 (U)	4	4	2	36	37	25
" "	8-CAGUAS	—	121301108		8-2 (U)	—	8		—	20	
" "	8-CAGUAS	—	121301140		8-2 (U)	—	5		—	21	
CAGUAS (2)	8-SAN LORENZO	1652106	126502106	126502106-1	8-1 (R)	6	5	1	25	32	26
" "	8-SAN LORENZO	1652116	126502116	126502201-1	8-1 (R)	10	6	1	30	31	32
" "	8-SAN LORENZO	1652301	126502301	126502301-1	8-1 (R)	5	3	2	32	31	39
" "	8-CAGUAS	1132137	121302136	121302112-1	8-2 (R)	8	1	6	29	28	29
" "	8-CAGUAS	1132113	121302113	121302113-1	8-2 (R)	2	4	0	22	25	15
" "	8-CAGUAS	1132203	121302141	121302208-1	8-2 (R)	3	3	1	27	24	31
" "	8-CAGUAS	1132122	121302122	121302122-1	8-3 (R)	9	3	2	22	39	24
" "	8-CAGUAS	1132201	121302306	121302306-1	8-3 (R)	6	3	1	31	34	23
" "	8-CAGUAS	—	121302303		8-2 (R)	—	1		—	20	
SAN JUAN (6)	9-RIO PIEDRAS	1601123	166011123	166011123-1	9-1 (U)	5	1	3	20	8	35
" " "	9-RIO PIEDRAS	1601157	166011157	166011157-1	9-1 (U)	4	2	2	34	26	25
" " "	9-RIO PIEDRAS	160120I	—	166011182-1	9-1 (U)	1	1	1	34	29	26
" " "	9-RIO PIEDRAS	1601202	—	166011183-1	9-1 (U)	2	1	0	33	33	29
" " "	9-RIO PIEDRAS	1601110	166021110	166021110-1	9-1 (U)	4	3	3	29	20	27
" " "	9-RIO PIEDRAS	1801106	—	166021142-1	9-1 (U)	5	3	0	25	30	34
" " "	9-SAN JUAN	1641102	166411102	166411117-1	9-1 (U)	0	8	1	26	39	26
" " "	9-SAN JUAN	1641107	166421107	166421107-1	9-1 (U)	6	1	1	47	27	28
" " "	9-CAROLINA	1152304	161501125	161501104-1	9-2 (R) (U)	4	3	2	29	33	37
" " "	9-CAROLINA	1152305	161502305	161501134-1	9-2 (R) (U)	1	7	2	33	50	30
" " "	9-CAROLINA	1152301	161502301	161501301-1	9-2 (R) (U)	11	2	2	35	15	25
" " "	9-RIO PIEDRAS	1601208	166021119	166021105-1	9-2 (U)	3	3	2	36	33	34
" " "	9-RIO PIEDRAS	1601126	166031126	166031126-1	9-2 (U)	1	0	1	14	24	30
SAN JUAN (6)	9-RIO PIEDRAS	1602130	166032130	166032130-1	9-1 (R)	2	3	0	33	25	38
" " "	9-RIO PIEDRAS	1602302	166032302	166032302-1	9-1 (R)	12	5	5	33	18	29
" " "	9-RIO PIEDRAS	1602303	166032303	166032303-1	9-1 (R)	2	2	2	18	41	34
" "	9-CAROLINA	1152108	161502108	161502108-1	9-2 (R)	3	1	1	37	19	38
" "	9-RIO PIEDRAS	—	166032124	—	9-1 (R)	—	8	—	—	33	—

CONTINUES FROM pg. 4

SKIN TEST DATA FOR 1963, 1969 & 1976
BY WATER SHEDS.

SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED URBAN OR R. STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
SAN JUAN (6)	10-BAYAMON	1111102	16111102	161111102-1	10-3 (U)	8	2	0	34	22	20
" " "	10-BAYAMON	1112301	16111142	161111142-1	10-3 (R) (U)	6	0	2	33	27	37
" " "	10-BAYAMON	1111125	16111125	161111304-1	10-3 (U)	4	4	1	36	26	27
" " "	10-BAYAMON	1111128	16112128	161121128-1	10-3 (U)	5	1	1	36	26	28
" " "	10-BAYAMON	1111126	—	161121150-1	10-3 (U)	3	1	0	33	22	29
" " "	10-CATAÑO	1161107	—	161601102-1	10-3 (U)	0	0	0	32	23	15
" " "	10-CATAÑO	116 1115	—	161601105-1	10-3 (U)	4	3	2	34	32	29
" " "	10-CATAÑO	1161111	16160111	161601111-1	10-3 (U)	1	1	0	29	26	20
" " "	10-CATAÑO	1162116	161601119	161601301-1	10-3 (U)	1	0	0	28	25	31
" " "	10-GUAYNABO	1301301	163001129	163001102-1	10-3 (U)	1	2	0	32	23	23
SAN JUAN (6)	10-GUAYNABO	1302125	163002125	163002125-1	10-1 (R)	1	2	0	26	23	21
" " "	10-RIO PIEDRAS	1602127	166032192	166032127-1	10-1 (R)	3	1	0	25	18	22
" " "	10-BAYAMON	1112306	161122306	161122306-1	10-2 (R)	2	4	0	35	39	22
" " "	10-GUAYNABO	1302304	163002304	163002304-1	10-2 (R)	2	0	0	27	12	32
" " "	10-BAYAMON	1112109	161122109	161122109-1	10-3 (R)	3	2	0	25	31	19
" " "	10-TOA BAJA	1692301	166902301	166902301-1	10-3 (R)	1	0	0	29	33	24
" " "	10-BAYAMON	—	161122302	—	10-3 (R)	—	13	—	—	27	—
CAGUAS (2)	11-AGUAS BUENAS	1042110	120402110	120402110-1	11-1 (R)	2	0	0	9	18	26
" "	11-AGUAS BUENAS	1042112	120402112	120402112-1	11-1 (R)	1	2	0	22	16	11
" "	11-AGUAS BUENAS	1042301	120402301	120402301-1	11-1 (R)	1	3	0	27	33	26
" "	11-CIDRA	1202107	122002107	122002107-1	11-1 (R)	6	2	3	34	28	35
" "	11-CIDRA	1202301	122002301	122002301-1	11-1 (R)	8	0	1	28	27	29

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CAGUAS (2)	12-CAYEY	1171102	12170 1102	12170 1102-1	12-1 (U)	1	8	1	42	28	31
" "	12-CAYEY	1171103	12170 1103	12170 1103-1	12-1 (U)	5	4	3	36	28	32
" "	12-CIDRA	1201105	1220011105	1220011105-1	12-2 (U)	5	3	0	36	37	24
" "	12-AIBONITO	1051101	12050 1101	12050 1101-1	12-3 (U)	7	3	0	36	38	37
" "	12-BARRANQUITAS	1101101	12100 1101	12100 1101-1	12-4 (U)	13	6	0	32	23	28
" "	12 COMERIO	1221125	12220 1101	12220 1101-1	12-4 (U)	18	10	0	35	21	26
" "	12-CAYEY	—	12170 1101	—	12-1 (U)	—	4	-	-	23	—
" "	12-BARRANQUITAS	—	12100 1105	—	12-4 (U)	—	3	—	—	27	—
CAGUAS (2)	12-CAYEY	1172112	12170 2112	12170 2112-1	12-1 (R)	5	6	4	32	19	26
" "	12-CAYEY	1172303	12170 2303	12170 2303-1	12-1 (R)	3	5	4	38	31	32
" "	12-CIDRA	1202106	—	12200 2303-1	12-1 (R)	4	2	0	22	22	22
" "	12-AIBONITO	1052302	12050 2302	12050 2302-1	12-2 (R)	1	1	0	26	35	16
" "	12-CIDRA	1202108	12200 2108	12200 2108-1	12-2 (R)	2	1	0	34	31	27
" "	12-COMERIO	1222109	12220 2109	12220 2110-1	12-2 (R)	3	2	0	36	21	11
" "	12-AIBONITO	1052107	12050 2107	12050 2107-1	12-3 (R)	10	13	3	19	27	19
" "	12-AIBONITO	1052109	12050 2112	12050 2109-1	12-3 (R)	3	9	0	31	51	20
" "	12-COAMO	1212115	15210 2115	15210 2115-1	12-3 (R)	0	1	1	16	30	23
" "	12-COMERIO	1222302	12220 2302	12220 2302-1	12-4 (R)	5	5	1	36	26	12
" "	12-COMERIO	—	12220 2110	—	12-2 (R)	—	3	—	—	15	—
HUMACAO (3)	13-PATILLAS	1541101-1	13540 1101-1	13540 1101-1	13-1 (U)	11	(20)	0	30	(92)	32
" "	13-PATILLAS	1541101-2	13540 1101-2	13540 1101-2	13-1 (U)	6		0	35		25
PONCE (5)	13-ARROYO	1081101-1	15080 1101-1	15080 1109-1	13-3 (U	5	16	1	32	100	21
" "	13-ARROYO	1081101-2	15080 1101-2	15080 1109-2	13-3 (U)	3		1	27		29
HUMACAO (3)	13-PATILLAS	1542103	13540 2105	13540 2108-1	13-1 (R)	2	4	1	12	24	29
" "	13-PATILLAS	1542121	13540 2121	13540 2121-1	13-1 (R)	4	10	0	26	37	15
" "	13-PATILLAS	1542302	13540 2302	13540 2302-1	13-1 (R)	3	3	2	24	31	23
" "	13-PATILLAS	1542118	13540 2118	13540 2118-1	13-2 (R)	2	4	1	18	29	15
PONCE (5)	13 ARROYO	1082102	15080 2102	15080 2102-1	13-3 (R)	10	9	0	22	49	28
" "	13-ARROYO	1082301	15080 2301	15080 2301-1	13-3 (R)	7	14	0	31	89	33
" "	13-ARROYO	—	15080 2302	—	13-3 (R	—		—	—		—
" "	13-ARROYO	1082302	15080 2302	15080 2302-1	13-3 (R)	1	5	1	37	37	23
HUMACAO (3)	13-PATILLAS	—	13540 2123	-	13-1 (R)	-	7	-	-	43	-
HUMACAO (3)	13-PATILLAS	—	13540 2301	-	13-2 (R)	-	4	-	-	25	-

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PONCE (5)	14-SALINAS	1621102	15620102-1	15620102-1	14-2 (U)	1	4	2	34	59	20
" "	14-SALINAS	—	15620102-2	—	14-2 (U)	—		—	—		—
" "	14-SALINAS	1621301	15620301	15620116-1	14-2 (U)	2	0	1	33	22	12
" "	14-GUAYAMA	1281101	15280101	15280101-1	14-3 (U)	8	7	1	35	45	17
" "	14-GUAYAMA	1281103	15280103	15280103-1	14-3 (U)	10	16	1	36	18	22
" "	14-GUAYAMA	1281104	15280104	15280104-1	14-3 (U)	4	12	1	41	45	25
PONCE (5)	14-SALINAS	1622104	15620204	15620204	14-1 (R)	0	1	2	24	18	31
" "	14-SALINAS	1622105	15620205	15620205-1	14-1 (R)	0	3	4	34	28	22
" "	14-SALINAS	1622108	15620208	15620208-1	14-1 (R)	1	1	3	22	42	36
" "	14-SALINAS	1622110	15620303	15620230-1	14-1 (R)	0	1	2	27	34	16
" "	14-GUAYAMA	—	15280210	—	14-1 (R)	—	1	—	—	18	—
" "	14-GUAYAMA	1282301	15280230	15280230-1	14-2 (R)	20	11	1	33	37	23
" "	14-GUAYAMA	1282119	15280219	15280230-2	14-2 (R)	4	0	2	13	12	28
" "	14-GUAYAMA	1282118	15280218	15280218-1	14-3 (R)	8	10	0	36	43	28
" "	14-GUAYAMA	1282302	15280230	15280230-2	14-3 (R)	1	7	1	29	29	21
PONCE (5)	15-JUANA DIAZ	1371101	15370102	15370102-1	15-1 (U)	4	3	5	38	30	30
" "	15-VILLALBA	1751122	15750122	15750122-1	15-2 (U)	1	1	1	37	29	39
" "	15 STA. ISABEL	1671101	15670101	15670101-1	15-3 (U)	7	5	1	29	26	32
" "	15-COAMO	1211101	15210101	15210101-1	15-4 (U)	2	1	5	33	22	29
" "	15-COAMO	1211106	15210106	15210106-1	15-4 (U)	3	3	2	36	26	35
PONCE (5)	15-JUANA DIAZ	1372301	15370230	15370230-1	15-1 (R)	9	3	4	25	18	25
" "	15-JUANA DIAZ	1372110	15370230	15370230-1	15-1 (R)	1	2	2	31	34	32
" "	15-VILLALBA	1752102	15750202	15750203-1	15-2 (R)	1	4	1	28	34	19
" "	15-VILLALBA	1752115	15750215	15750215-1	15-2 (R)	4	1	1	17	28	20
" "	15-VILLALBA	1752109	15750209	15750220-1	15-2 (R)	0	2	0	15	12	15
" "	15-COAMO	1212301	15210230	15210230-1	15-3 (R)	0	3	2	24	24	31
" "	15-STA. ISABEL	1672301	15670230	15670211-1	15-3 (R)	6	1	0	24	21	21
" "	15-STA. ISABEL	1672302	15670230	15670230-1	15-3 (R)	4	4	5	23	23	25
" "	15-COAMO	—	15210211	—	15-4 (R)	—	1	—	—	35	—
" "	15-COAMO	1212112	15210212	15210212-1	15-4 (R)	0	0	0	11	11	9
" "	15-COAMO	1212123	15210223	15210223-1	15-4 (R)	5	3	1	40	32	27
" "											

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SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED UNDER STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
ARECIBO (1)	16-OROCOVIS	153 1101-1	115301101-1	115301101-1	16-2 (U)	8	8	1	47	91	31
" "	16-OROCOVIS	153 1101-1	115301101-2	115301101-2	16-2 (U)	5		0	38		22
CAGUAS (2)	16-BARRANQUITAS	1602304	121002304	121002304-1	16-1 (R)	1	4	1	24	30	32
SAN JUAN (6)	16-BOREAL	1232102	—	162302304-1	16-1 (R)	2	1	0	36	36	25
ARECIBO (1)	16-MOROVIS	1502111	115002111	115002111-1	16-2 (R)	1	1	2	38	27	27
" "	16-MOROVIS	1502116	—	115002208-1	16-2 (R)	0	1	1	19	52	26
" "	16-OROCOVIS	1532302	115302302	115302302-1	16-2 (R)	3	0	2	38	23	23
" "	16-OROCOVIS	1532121	—	115302302-2	16-2 (R)	1	1	1	18	21	26
" "	16-OROCOVIS	1532303	115302303	115302303-1	16-2 (R)	2	4	0	34	31	27
ARECIBO (1)	17-CIALES	119 1101-1	111901124-1	111901124-1	17-1 (U)	3	8	0	36	63	18
" "	17-CIALES	1191101-2	111901124-2	111901124-2	17-1 (U)	4		3	23		26
ARECIBO (1)	17-CIALES	1192107	—	111902107	17-1 (R)	2	2	1	23	30	22
" "	17-MOROVIS	1502117	—	115002117	17-1 (R)	0	0	0	8	21	36
" "	17-OROCOVIS	1532125	115302125	115302125-1	17-1 (R)	1	0	0	9	10	12
" "	17-OROCOVIS	1532304	115302304	115302304-1	17-1 (R)	1	0	1	31	38	25
" "	17-OROCOVIS	1532306	115302306	115302306-1	17-1 (R)	0	0	0	18	25	35
" "	17-CIALES	119 2202	111902122	111902116-1	17-2 (R)	0	1	0	12	20	14
" "	17-OROCOVIS	1532301	115302301	115302301-1	17-2 (R)	2	0	1	28	21	22
CAGUAS (2)	18-NARANJITO	1521101-1	125201101-1	125201101-1	18-2 (U)	3	17	0	38	56	21
" "	18-NARANJITO	1521101-2	125201101-2	125201101-2	18-2 (U)	2		0	30		29
SAN JUAN (6)	18-TOA ALTA	1681101-1	166801101-1	166801101-1	18-3 (U)	2	0	0	36	48	32
" " "	18-TOA ALTA	1681101-2	—	166801101-2	18-3 (U)	5	3	1	36	35	32
CAGUAS (2)	18-COMERIO	122 2103	—	122202103-1	18-1 (R)	2	1	0	14	14	4
SAN JUAN (6)	18-BAYAMON	1112303	161122303	161122303-1	18-1 (R)	2	5	0	43	24	20
CAGUAS (2)	18-NARANJITO	1522106	125202106	125202106-1	18-2 (R)	1	6	1	34	28	40
" "	18-NARANJITO	1522201	125202302	125202118-1	18-2 (R)	2	0	0	26	27	28
SAN JUAN (6)	18-DORADO	1252110	162502110	162502110-1	18-3 (R)	2	3	0	22	21	30
" " "	18-TOA ALTA	1682104	—	166802202-1	18-3 (R)	6	3	1	38	29	20
" " "	18-TOA ALTA	1682106	—	166802202-2	18-3 (R)	2	2	0	16	32	27
" " "	18-TOA ALTA	1682301	166802301	166802301-1	18-3 (R)	6	0	0	33	22	18

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REGION (#)		1963	1969	1976		1963	1969	1976	1963	1969	1976
SAN JUAN (6)	19-DORADO	1251301	162501101	162501101-1	19-1 (U)	3	4	0	40	40	29
" " "	19-TOA BAJA	1691101	166901101	166901101-1	19-1 (U)	2	0	1	30	13	26
ARECIBO (1)	19-VEGA BAJA	1731101	117301101	117301101-1	19-2 (U)	3	3	0	39	35	27
" "	19-MOROVIS	1501102	115001102	115001102-1	19-3 (U)	1	4	0	35	27	34
" "	19-VEGA ALTA	1721103	117201102	117201121-1	19-4 (U)	3	7	1	30	34	34
" "	19-VEGA ALTA	1721104	—	117201122-1	19-4 (U)	2	1	0	35	35	29
SAN JUAN (6)	19-COROZAL	1231101	162301101	162301125-1	19-5 (U)	2	11	1	34	44	32
SAN JUAN (6)	19-DORADO	1252302	162502302	162502302-1	19-1 (R)	1	1	0	36	31	23
ARECIBO (1)	19-MANATI	1452110	—	114502302	19-2 (R)	1	2	2	17	33	32
" "	19-VEGA BAJA	1732113	117302113	117302113-1	19-2 (R)	2	1	0	31	23	26
" "	19-VEGA BAJA	1732117	117302117	117302117-1	19-3 (R)	0	2	1	19	23	15
" "	19-VEGA ALTA	1722301	117202301	117202301-1	19-4 (R)	2	2	0	38	31	20
" "	19-VEGA BAJA	1732302	—	117302302-1	19-4 (R)	0	0	0	32	24	26
CAGUAS (2)	19-NARANJITO	1522115	—	125202115-1	19-5 (R)	4	2	0	22	22	26
SAN JUAN (6)	19-COROZAL	1232301	162302301	162302301-1	19-5 (R)	2	3	0	25	31	25
" " "	19-COROZAL	1232302	—	162302302-1	19-5 (R)	2	1	0	16	16	27
ARECIBO (1)	20-FLORIDA	1092401	110911118-1	110911118-1	20-1 (U)	3	0	2	33	19	19
" "	20-BARCELONETA	1091101-1	110901119-1	110901119-1	20-2 (U)	2	1	3	30	25	28
" "	20-BARCELONETA	1091101-2	—	110901119-2	20-2 (U)	2	1	0	32	30	19
" "	20-MANATI	1451101-1	114501101-1	114501101-1	20-2 (U)	1	2	2	30	33	23
" "	20-MANATI	1451101-2	—	114501101-2	20-2 (U)	1	1	1	30	25	22
" "	20-MANATI	1451102	114501102	114501102-1	20-2 (U)	2	3	2	40	29	28
ARECIBO (1)	20-ARECIBO	1072302	—	110702302-1	20-1 (R)	3	2	1	28	27	26
" "	20-ARECIBO	1072307	—	110702307-1	20-1 (R)	4	2	0	18	18	21
" "	20-BARCELONETA	1092301	110902301	110902301-1	20-1 (R)	1	1	0	23	26	18
" "	20-FLORIDA	1092106	110912106	110912106-1	20-1 (R)	0	1	2	23	17	20
" "	20-MANATI	1452105	114502105	114502202-1	20-2 (R)	0	0	0	31	33	27
" "	20-MANATI	1452116	114502116	114502205-1	20-2 (R)	1	1	1	34	29	18
" "	20-MANATI	1457301	—	114507301-1	20-2 (R)	1	1	2	28	22	35

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ARECIBO (1)	21-ARECIBO	1071108	110701102	110701102-1	21-1 (U)	1	3	0	22	28	24
" "	21-ARECIBO	1071104	110701104	110701104-1	21-1 (U)	5	3	1	28	25	20
" "	" "	1071105	110701105	110701105-1	21-1 (U)	5	6	0	32	29	32
" "	" "	1071106	110701106	110701106-1	21-1 (U)	5	0	2	23	14	27
" "	" "	1071143	110701143	110701143-1	21-1 (U)	11	3	2	28	23	29
" "	" "	1071144	110701144	110701144-1	21-1 (U)	4	1	0	34	22	11
ARECIBO (1)	21-ARECIBO	1072132	110702132	110702132-1	21-1 (U)	7	3	3	24	15	28
" "	" "	1072133	110702133	110702133-1	21-1 (U)	0	0	1	21	20	15
" "	" "	1072303	110702303	110702303-1	21-1 (U)	1	2	0	23	23	27
" "	" "	1072304	110702304	110702304-1	21-1 (U)	2	6	1	29	25	21
" "	" "	1072308	110702308	110702308-1	21-1 (U)	0	1	0	20	16	16
" "	" "	1072134	110702309	110702309-1	21-1 (U)	0	0	0	16	39	22
PONCE (5)	22-ADJUNTAS	1011101	150101101-1	150101102-1	22-1 (U)	1	10	2	41	66	28
" "	22-ADJUNTAS	—	150101101-2	—	22-1 (U)	—		—	—		—
ARECIBO (1)	22-UTUADO	1712133	117102133	117101133-1	22-1 (U)	9	5	0	23	17	32
" "	22-UTUADO	1711102-1	117101102-1	117101149-1	22-2 (U)	5	21	2	32	69	28
" "	22-UTUADO	1711102-2	117101102-2	117101149-2	22-2 (U)	10		0	30		25
" "	22-UTUADO	1712140	117102140	117101141-1	22-2 (U)	2	1	0	24	22	20
PONCE (5)	22-JAYUYA	1361102	153601101	153601101-1	22-4 (U)	8	6	1	34	37	29
" "	22-JAYUYA	1362116	—	153601101-2	22-4 (U)	1	1	1	23	24	25
ARECIBO (1)	22-UTUADO	—	117101102-3	—	22-2 (U)	—	10	—	—	34	—
ARECIBO (1)	22-UTUADO	1712301	117102301	117102301-1	22-1 (R)	6	6	0	28	32	33
" "	22-UTUADO	1712306	117102306	117102306-1	22-1 (R)	5	8	0	23	32	24
" "	22-UTUADO	1712111	—	117102306-2	22-1 (R)	3	2	0	15	20	15
" "	22-UTUADO	1712401	117102401	117102401-1	22-1 (R)	6	2	0	28	24	22
PONCE (5)	22-ADJUNTAS	1012130	—	150102129-1	22-1 (R)	1	3	7	8	15	22
ARECIBO (1)	22-UTUADO	1712302	—	117102302-1	22-2 (R)	3	2	1	34	33	31
" "	22-CIALES	1192302	119102302	119102302-1	22-3 (R)	2	3	3	28	41	20
" "	22-UTUADO	1712122	—	117102303-1	22-3 (R)	2	2	1	12	19	22
PONCE (5)	22-JAYUYA	1362302	153602302	153602302-1	22-3 (R)	0	3	1	30	32	34
" "	22-JAYUYA	1362104	153602104	153602104-1	22-4 (R)	2	3	1	17	22	32
" "	22-JAYUYA	1362106	153602121	153602121-1	22-4 (R)	11	7	5	26	24	26

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PONCE (5)	23-PONCE	1561171	155601171	15560|110-1	23-2 (U)	3	6	2	37	31	25
" "	" "	1561111	155601111	15560|111-1	23-2 (U)	2	5	1	35	37	25
" "	" "	1561112	—	15560|112-1	23-2 (U)	0	3	5	32	38	32
" "	" "	1562124	155612160	15560|124-1	23-2 (U)	1	3	1	31	28	27
" "	" "	1561102	—	15561|101-1	23-3 (U)	2	1	1	34	22	31
" "	" "	156|104	15561|105	15561|105-1	23-3 (U)	2	7	0	36	25	31
" "	" "	1561106	15561|106	15561|106-1	23-3 (U)	1	7	1	40	24	29
" "	" "	1561107	—	15561|107-1	23-3 (U)	1	1	0	31	62	26
" "	" "	1561115	—	15561|115-1	23-3 (U)	1	1	1	39	31	20
PONCE (5)	23-DIAZ	1372120	153702117	15570|2302-1	23-1 (R)	0	5	4	16	36	33
" "	23-PONCE	1562120	155602120	15560|2120-1	23-1 (R)	3	3	2	38	36	32
" "	" "	1562130	—	15560|2130-1	23-1 (R)	0	4	7	10	33	29
" "	" "	1562301	155602301	15560|2301-1	23-1 (R)	6	1	0	28	28	28
" "	" "	1562135	155602135	15560|2135-1	23-2 (R)	0	3	1	8	6	6
" "	" "	1562137	155602133	15560|2137-1	23-2 (R)	0	6	0	11	25	12
" "	" "	1562145	—	15561|2145-1	23-2 (R)	2	1	1	24	18	28
" "	" "	1562151	155612151	15561|2202-1	23-3 (R)	0	4	1	26	24	32
" "	" "	1562302	155612302	15561|2302-1	23-3 (R)	1	1	0	29	13	15
PONCE (5)	24-PEÑUELAS	1551101-1	155501101-1	15550|1101-1	24-1 (U)	5	3	2	35	25	19
" "	" "	155|101-2	—	15550|1101-2	24-1 (U)	0	1	2	29	33	33
" "	" "	1552109	155502301	15550|1101-3	24-1 (U)	4	4	0	27	20	23
" "	24-GUAYANILLA	1291119	152901119-1	15290|1119-1	24-2 (U)	0	1	4	23	18	30
" "	" "	1291120-1	152901120	15290|1120-1	24-2 (U)	2	0	3	28	26	27
" "	" "	1291120-2	—	15290|1202	24-2 (U)	0	1	3	29	19	28
" "	24-YAUCO	1771101-1	157701101-1	15770|1101-1	24-3 (U)	1	0	6	29	36	35
" "	" "	1771101-2	—	15770|1101-2	24-3 (U)	0	1	2	34	21	21
PONCE (5)	24-GUAYANILLA	1292111	152902111	15290|2111-1	24-2 (R)	0	4	4	23	32	35
" "	24-GUAYANILLA	1292301	152902301	15290|2301-1	24-2 (R)	0	4	5	22	24	33
" "	24-PEÑUELAS	1552302	155502302	15550|2302-1	24-2 (R)	2	8	2	25	25	21
" "	24-YAUCO	1772109	157702109	15770|2109-1	24-3 (R)	0	1	3	19	24	20
" "	" "	1772115	157702116	15770|2115-1	24-3 (R)	0	1	6	25	29	36
" "	" "	1772131	—	15770|2301-1	24-3 (R)	2	6	11	15	29	39
" "	" "	1772302	157702302	15770|2302-1	24-3 (R)	9	4	0	34	24	28
MAYAGUEZ (4)	24-SAB. GDE.	1612115	—	14610|2201-1	24-4 (R)	0	1	1	25	64	32
PONCE (5)	24-YAUCO	1772105	157702105	15770|2105-1	24-4 (R)	8	0	7	36	16	34

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SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSHED USGS STREAM	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
PONCE (5)	25-ADJUNTAS	1012116	150102116	150102301-1	25-1 (R)	1	2	4	15	15	23
ARECIBO (1)	25-LARES	1402130	1140021130	1140021130-1	25-1 (R)	0	2	1	22	20	6
" "	" "	1402303	1140021303	1140021303-1	25-1 (R)	1	5	0	24	28	19
" "	" "	1402126	—	1140021305-1	25-1 (R)	1	1	1	14	18	27
PONCE (5)	24-YAUCO	1772113	157702113	157702113-1	25-1 (R)	0	9	4	13	24	23
MAYAGUEZ (4)	26-AGUADA	1021101	14021101	140201101-1	26-1 (U)	2	1	0	38	37	28
" "	26-AGUADILLA	1031101	140301102	140301101-1	26-2 (U)	0	0	0	18	18	26
" "	" "	1031103	—	140301104-1	26-2 (U)	2	2	1	30	40	34
" "	26-MOCA	1491101	144901101	144901101-1	26-2 (U)	2	2	1	30	19	26
" "	26-ISABELA	1351101-1	143501101-1	143501101-1	26-3 (U)	2	1	4	34	21	35
" "	" "	1351101-2	—	143501101-2	26-3 (U)	2	1	0	30	30	35
" "	26-S. SEBASTIAN	1661101-	146601101	146601101-1	26-4 (U)	5	7	0	36	23	21
ARECIBO (1)	26-LARES	1401101	114001101	114001101-1	26-5 (U)	0	5	2	30	22	28
" "	26-LARES	1401102	—	114001104-1	26-5 (U)	0	1	1	32	42	21
" "	26-CAMUY	1141101	1114011101	1114011101-1	26-6 (U)	0	0	2	25	32	19
" "	26-QUEBRADILLAS	1571101	1157011101	1157011101-1	26-6 (U)	2	0	1	30	23	22
" "	26-HATILLO	1321101	1132011101	1132011101-1	26-8 (U)	1	1	0	28	19	29
MAYAGUEZ (4)	26-RINCON	—	145801101	—	26-1 (U)	—	1	—	—	34	—
MAYAGUEZ (4)	26-RINCON	1582107	AGUADA 140202107	145802110-1	26-1 (R)	0	1	0	17	38	25
" "	26-RINCON	1582109	—	145802112-1	26-1 (R)	0	0	0	13	20	26
" "	26-AGUADA	1022302	140202302	140202302-1	26-2 (R)	0	1	0	34	33	34
" "	26-MOCA	1492302	—	144902302-1	26-2 (R)	2	2	1	19	28	25
" "	26-AGUADILLA	1032302	140302302	140302302-1	26-3 (R)	3	1	0	31	29	30
" "	26-ISABELA	1352110	—	1435021141	26-3 (R)	3	2	0	16	21	23
" "	26-MOCA	1492122	—	144902303-1	26-3 (R)	4	2	1	28	23	36
" "	26-S. SEBASTIAN	1662133	146602133	146602133-1	26-4 (R)	0	1	1	29	22	19
" "	" " "	1662136	—	146602136-1	26-4 (R)	0	0	0	22	18	14
" "	" " "	1662303	—	146602303-1	26-4 (R)	0	0	0	25	22	20
ARECIBO (1)	26-CAMUY	1142201	111402110	111402304-1	26-5 (R)	2	1	0	11	18	31
" "	" "	1142104	111402103	111402103-1	26-6 (R)	0	1	0	9	13	24
" "	" "	1142105	—	111402105-1	26-6 (R)	1	2	2	19	31	26
" "	26-HATILLO	1322105	113202105	113202301-1	26-7 (R)	0	0	0	25	8	33
" "	26-ARECIBO	1072130	—	1107021305-1	26-8 (R)	0	0	0	17	21	24
" "	26-HATILLO	1322114	113202114	113202114-1	26-8 (R)	5	0	0	30	22	31

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SCHOOL REGION (#)	WATERSHED AND MUNICIPALITY	SCHOOL CODE NUM. 1963	1969	1976	WATERSH. U OR R STRATA	POSITIVES 1963	1969	1976	TOTALS 1963	1969	1976
MAYAGUEZ (4)	27-LAS MARIAS	1411101	144101101	144101101-1	27-2 (U)	3	0	2	29	27	34
" "	27-AÑASCO	1061102-1	140601102-1	140601103-1	27-3 (U)	7	9	0	27	52	40
" "	" "	1061102-2	140601102-2	140601103-2	27-3 (U)	3		1	27		30
" "	" "	1061102-3	—	140601103-3	27-3 (U)	3	2	0	15	20	39
MAYAGUEZ (4)	27-LAS MARIAS	1412302	144102302	144102102-1	27-1 (R)	2	1	0	25	35	8
MAYAGUEZ (4)	27-MARICAO	1462115	—	144602301-1	27-1 (R)	0	0	0	28	29	30
" "	27-LAS MARIAS	1412117	144102301	144102117-1	27-2 (R)	0	0	0	13	31	11
" "	27-MAYAGUEZ	1482301-1	144802301-1	144802301-1	27-2 (R)	2	2	1	35	32	25
" "	" "	1482301-2	—	144802301-2	27-2 (R)	3	1	0	40	27	25
" "	27-AÑASCO	1062109	—	140602109-1	27-3 (R)	1	1	0	14	28	13
" "	27-AÑASCO	1062123	140602123	140602123-1	27-3 (R)	2	0	0	24	15	30
" "	27-AÑASCO	1062302	—	140602132-1	27-3 (R)	1	1	0	25	50	23
" "	27-AÑASCO	1062117	—	140602132-2	27-3 (R)	0	0	0	15	19	22
" "	27-AÑASCO	1062301	140602301	140602301-1	27-3 (R)	0	1	0	27	20	34
MAYAGUEZ (4)	28-MAYAGUEZ	1481101	144801101	144801101-1	28-1 (U)	12	6	0	22	29	29
" "	" "	1481103	144801103	144801103-1	28-1 (U)	0	0	2	41	32	28
" "	" "	1481105	144801105	144801105-1	28-1 (U)	13	0	0	28	24	21
" "	" "	1481107	144801107	144801107-1	28-1 (U)	3	3	1	25	20	27
" "	" "	1481112	144801112	144801112-1	28-1 (U)	2	0	3	32	21	29
" "	" "	1481142	144801142	144801142-1	28-1 (U)	7	1	1	37	29	28
" "	" "	1481110	144801117	144801148-1	28-1 (U)	6	1	1	44	26	29
MAYAGUEZ (4)	28-MAYAGUEZ	1482134	144802134	144802134-1	28-1 (R)	0	2	0	19	28	27
" "	" "	1482303-1	144802303	144802303-1	28-1 (R)	2	1	0	14	24	21
" "	" "	1482303-2	—	144802303-2	28-1 (R)	1	1	0	19	38	21

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MAYAGUEZ (4)	29-SABANA Gde.	1611101	146101101	14610101-1	29-1 (U)	1	8	0	27	30	30
" "	29-SAN GERMAN	1631102	146301102	14630102-1	29-1 (U)	5	3	0	29	25	35
" "	" " "	1631103	146301103	14630103-1	29-1 (U)	3	2	1	39	28	29
" "	29-CABO ROJO	1121101	141201101	14120101-1	29-2 (U)	3	3	2	24	23	30
" "	29-HORMIGUEROS	1331101	143301101	14330101-1	29-3 (U)	3	2	0	28	27	32
" "	29-MARICAO	1461101	144601101	14460101-1	29-3 (U)	3	0	3	31	28	24
MAYAGUEZ (4)	29-SAN GERMAN	1632124	146302124	14630212-1	29-1 (R)	2	4	0	18	9	11
" "	" " "	1632302	146302302	14630230-1	29-1 (R)	2	3	0	23	27	32
" "	" " "	1632116	146302116	14630211-1	29-2 (R)	2	0	0	25	24	28
" "	" " "	1632301	—	14630230-1	29-2 (R)	2	2	1	18	25	21
" "	" " "	1632304-1	146302304-1	14630230-1	29-2 (R)	1	0	0	27	17	26
" "	" " "	1632304-2	—	14630230-2	29-2 (R)	2	2	2	24	26	28
" "	29-CABO ROJO	1122105	—	14120210-1	29-3 (R)	0	0	0	15	23	32
" "	29-MAYAGUEZ	1482132	144802132	14480213-1	29-3 (R)	3	1	1	27	28	25
" "	" "	1482135	144802135	14480213-1	29-3 (R)	2	2	4	32	31	29
MAYAGUEZ (4)	30-LAJAS	1391101	143901101	14390110-1	30-1 (U)	2	1	1	32	31	28
PONCE (5)	30-GUANICA	1271102-1	152701102	15270110-1	30-1 (U)	3	2	2	22	22	23
" "	" "	1271102-2	—	15270110-2	30-1 (U)	4	3	2	33	30	26
" "	" "	1271104-1	152701104	15270110-1	30-1 (U)	2	1	2	36	21	17
" "	" "	1271104-2	—	15270110-2	30-1 (U)	1	2	3	29	28	27
MAYAGUEZ (4)	30-CABO ROJO	1122119	141202124	14120212-1	30-1 (R)	1	0	0	10	27	19
" "	30-LAJAS	1392117	—	14390211-1	30-1 (R)	2	3	4	24	27	29
" "	" "	1392122	143902122	14390212-1	30-1 (R)	1	6	0	31	31	30
" "	" "	1392301	143902301	14390230-1	30-1 (R)	1	2	0	31	20	31
" "	30-SABANA Gde.	1612301	—	14610230-1	30-1 (R)	0	0	0	36	36	37
PONCE (5)	30-GUANICA	1272106	152702106	15270210-1	30-1 (R)	2	0	0	13	13	22
HUMACAO (3)	31-VIEQUES	1741102	137401302	13740111-0-1	31-1 (U)	1	6	0	29	50	28
HUMACAO (3)	31-VIEQUES	1742104	137402104	13740210-4-1	31-1 (R)	6	1	4	24	23	26
" "	" "	1742107	137402107	13740210-7-1	31-1 (R)	2	6	2	28	49	38
" "	" "	1742109	137402109	13740210-9-1	31-1 (R)	2	4	4	17	47	37