

**ACCOMPLISHMENTS AND COSTS OF THE
RESIDUAL SPRAY PROGRAM, F.Y. 1947-1949**

by
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For ready reference the accompanying summary of "Base Line Data of Residual Spray Program Accomplishments and Costs" has been prepared from records submitted to the Malaria Control Office of the Communicable Disease Center. Since fiscal controls currently employed were placed into effect on July 1, 1946, data prior to that period are not included.

The various related items are presented in groups, i.e., numbers 1 and 2 refer to operational areas; numbers 3, 4, and 5, to the houses sprayed, amount of DDT used, and the average number of pounds of DDT per application.

It may be noted that, with the exception of one State, the amount of DDT used per application has increased at a fairly uniform rate. For fiscal year 1949, an appreciable increase in man-hours per application occurred in most States. This increase was due partly to the inclusion of man-hours for supervisory personnel reported on progress reports, under classification 101, as chargeable to actual spray operations. This classification is not included in data for fiscal year 1947-1948.

Column 9 indicates method of financing spray operations; columns 10 and 11 show initial fiscal year allocations and funds available at the end of the fiscal year after interim adjustments. Columns 12 through 15 reflect variations in rate of expenditure throughout the fiscal year. Such variations can readily be expected in seasonal operational programs.

Columns 16, 17, and 18 show funds available for operations from the various sources, with the total amount expended as compiled from the "Quarterly Summary of Local Contribution and Federal Cost." Column 19 shows that CDC costs, when expressed as a percentage of the total cost, have declined each year for most operations. The average cost per application of DDT has shown some increase during 1949 except in a few States. This may be explained as being largely due to purchases of a considerable number of new automotive units, and to conducting complete premises spraying in lieu of residential spraying as was the general practice in previous years.

State	FY	1 2		3	4 5		6
		Operations		No. Spray App.*	Pounds DDT		Man-
		No. Counties PA ¹	OP		Per App.*	Total	
Alabama	1947	33	21	135,876	0.83	112,911	1.40
	1948	33	33	150,493	1.00	150,326	1.20
	1949	33	31	122,070	1.25	153,595	1.37
Arkansas	1947	53	38	178,836	0.74	133,195	1.27
	1948	53	42	181,562	1.15	209,422	1.50
	1949	53	50	113,825	1.27	143,462	2.10
Florida	1947	39	26	59,619	0.82	48,858	1.71
	1948	39	34	92,994	1.09	100,980	1.40
	1949	39	30	49,335	1.43	70,555	1.77
Georgia	1947	55	52	203,803	0.87	177,457	1.07
	1948	55	53	189,774	0.77	146,685	0.94
	1949	55	39	140,554	0.82	115,892	1.07
Kentucky	1947	4	11	18,427	0.77	14,202	1.88
	1948	4	11	15,916	1.71	27,179	3.21
	1949	4	11	12,726	2.42	30,736	3.93
Louisiana	1947	26	17	71,400	0.80	57,043	1.10
	1948	26	18	62,969	1.29	77,797	1.34
	1949	26	18	50,973	1.22	62,055	1.51
Mississippi	1947	46	18	188,212	0.70	131,380	1.34
	1948	46	19	174,494	1.00	174,279	1.21
	1949	46	22	133,686	1.53	204,780	1.37
Missouri	1947	9	9	71,040	0.56	40,004	1.02
	1948	9	12	80,107	0.80	63,911	1.26
	1949	9	13	43,766	1.23	53,989	1.65
N. Carolina	1947	11	42	58,829	0.70	41,030	1.11
	1948	11	36	58,481	0.90	52,803	1.14
	1949	11	35	87,141	0.94	81,698	0.99
Oklahoma	1947	10	10	35,279	0.99	34,821	1.62
	1948	10	15	37,319	1.08	40,303	1.39
	1949	10	15	26,351	1.27	33,507	1.50
S. Carolina	1947	23	27	127,273	0.67	85,468	1.32
	1948	23	41	189,359	0.93	176,814	1.33
	1949	23	46	177,866	1.11	196,931	1.32
Tennessee	1947	17	12	40,315	1.09	43,959	1.40
	1948	17	13	35,426	1.97	69,662	2.46
	1949	17	13	25,340	1.69	42,858	2.31
Texas	1947	43	32	89,600	0.80	71,610	1.81
	1948	43	33	94,905	1.12	115,652	1.87
	1949	43	38	71,870	1.01	72,225	1.91
All States	1947	369	315	1,278,509	0.78	991,938	1.32
	1948	369	360	1,363,799	1.03	1,405,813	1.36
	1949	369	361	1,055,503	1.20	1,262,283	1.50
Grand Total FY 1947, 1948, 1949				3,697,811	0.99	3,660,034	1.39

*App. = Application

NOTES:

¹ During the first half of fiscal year 1947, 188 counties were preapproved for operations. Since the larger part of the operations took place during the second half of the fiscal year, the counties preapproved for that period are shown.

² Fiscal year 1949 man-hours include, in addition to re-

**BASE LINE DATA OF
RESIDUAL SPRAY PROGRAM ACCOMPLISHMENTS AND COSTS**

7		8	9	10		11				12	13	14	15	16		17		18	19	20
Hours		Per Lb. DDT	Total ²	Method of Financing ³	CDC Allocation		Percent of Allocation Obligated by Quarters				Costs				Avg. Cost Per App.*					
					Initial ⁴	Final ^{4,5}	1st	2d	3d	4th	CDC ⁵	State- Local	Total	% CDC						
1.69	190,818		3	\$ 383,400	\$ 392,400	29.6	22.6	08.2	44.9	\$ 413,374	\$ 65,620	\$ 478,994	86.3	\$3.52						
1.20	181,283		1	323,300	318,000	29.0	03.7	23.5	53.5	348,936	117,576	466,512	74.8	3.10						
1.10	166,725		1	259,200	228,200	21.0	11.1	26.3	41.5	227,995	130,371	358,366	63.6	2.94						
1.72	226,620		1	549,300	577,500	44.1	28.5	08.0	21.4	589,155	154,408	743,563	79.2	4.16						
1.30	273,173		4	450,000	450,000	41.8	19.4	19.4	17.5	441,385	279,291	720,676	61.2	3.97						
1.65	239,471		4	403,200	400,543	37.5	26.0	15.3	22.4	405,524	331,691	737,215	55.0	6.48						
2.09	101,825		1	269,400	330,200	39.1	32.0	15.9	12.2	327,668	90,188	417,856	78.4	7.01						
1.28	129,980		1	212,250	211,350	49.1	16.0	16.0	24.2	222,541	235,514	458,055	48.6	4.93						
1.24	87,293		1	201,200	176,940	49.1	08.4	18.5	23.6	176,201	101,535	277,736	63.4	5.63						
1.23	218,941		1	312,500	319,700	36.8	32.7	09.9	21.8	323,436	181,240	504,676	64.1	2.48						
1.22	177,781		1	279,400	279,400	28.4	11.1	30.8	30.6	281,922	167,312	449,234	62.8	2.37						
1.30	150,580		1	227,100	224,600	37.9	14.7	15.0	33.2	226,414	158,053	384,467	58.9	2.74						
2.44	34,585		3	79,900	74,250	29.7	22.0	31.5	18.4	75,420	27,990	103,410	72.9	5.61						
1.88	51,144		3	85,700	85,700	14.1	13.8	31.7	53.0	96,508	47,220	143,728	67.1	9.03						
1.62	50,048		3	68,900	57,900	30.5	18.5	28.5	21.4	57,237	36,248	93,485	61.2	7.35						
1.38	78,751		1	266,400	270,608	44.6	33.9	02.5	17.7	267,078	31,621	298,699	89.4	4.18						
1.04	84,587		1	220,000	219,000	30.6	06.8	45.6	21.7	229,246	70,546	299,792	76.5	4.76						
1.24	77,017		3	207,800	197,800	23.5	10.9	27.8	38.6	199,309	61,614	260,923	76.4	5.12						
1.91	252,592		2	433,400	441,400	32.9	19.9	10.1	37.6	443,585	80,340	523,925	84.7	2.78						
1.21	211,589		2	376,500	375,900	28.1	09.0	27.5	33.7	369,587	185,685	555,272	66.6	3.18						
0.90	183,006		2	344,700	337,828	09.4	22.4	19.2	49.3	339,000	258,782	597,782	56.7	4.47						
1.82	72,227		3	164,500	161,822	28.3	33.3	18.8	19.9	163,999	31,129	195,128	84.0	2.75						
1.58	100,573		3	141,500	141,500	32.4	18.0	24.7	24.4	140,729	71,417	212,146	66.3	2.65						
1.34	72,162		3	122,700	122,700	18.2	20.1	25.3	35.9 ⁶	122,064 ⁶	63,390	185,434	65.8	4.24						
1.59	65,560		1	134,700	142,400	35.2	24.9	03.5	37.2	143,525	69,015	212,540	67.5	3.61						
1.27	66,907		1	119,250	119,250	37.1	02.0	18.8	38.1	114,488	87,722	202,210	56.6	3.46						
1.05	86,630		1	113,600	111,600	18.4	12.2	38.9	29.3	110,312	156,290	266,602	41.4	3.06						
1.64	57,116		3	117,900	117,200	29.3	32.8	14.3	23.8	117,474	65,933	183,407	64.1	5.20						
1.29	52,026		4,1	110,500	110,500	36.2	17.2	16.4	28.6	108,736	44,670	153,406	70.9	4.11						
1.18	39,417		3	94,800	91,800	38.5	11.0	26.4	21.2	89,149	26,051	115,200	77.4	4.37						
1.97	167,568		2	301,000	321,200	45.8	26.9	05.0	22.4	321,547	160,303	481,850	66.7	3.79						
1.43	252,286		2	259,000	259,365	39.4	18.8	16.9	23.3	255,158	416,701	671,859	38.0	3.55						
1.19	235,629		2	245,000	245,000	31.9	17.3	21.6	29.0	244,609	318,709	563,318	43.4	3.17						
1.28	56,290		1	166,500	165,600	35.4	22.4	11.4	31.9	170,669	83,651	254,320	67.1	6.31						
1.25	87,046		1	170,800	170,950	53.3	10.8	13.7	14.6	157,975	142,521	300,496	52.6	8.48						
1.37	58,558		1	144,000	144,000	20.0	22.5	19.4	38.5	144,536	36,994	181,530	79.6	7.16						
2.26	162,223		1	368,900	378,159	42.9	25.4	13.2	21.0	380,774	122,140	502,914	75.7	5.61						
1.67	192,995		3	338,700	345,278	31.1	20.9	11.7	34.1	337,761	111,514	449,275	75.2	4.73						
1.89	137,672		1	277,500	282,110	37.8	24.6	12.2	25.1	281,254	71,310	352,564	79.8	4.91						
1.69	1,685,116			3,547,800	3,692,439	38.0	27.4	10.1	25.7	3,737,704	1,163,578	4,901,282	76.3	3.83						
1.32	1,861,370			3,086,900	3,086,193	35.0	13.3	22.5	29.8	3,104,972	1,977,689	5,082,661	61.1	3.73						
1.25	1,584,208			2,709,700	2,621,021	28.9	18.3	20.5	32.4	2,623,584	1,751,038	4,374,622	60.0	4.14						
1.40	5,130,694			\$9,344,400	\$9,399,653	34.0	19.7	17.7	29.3	\$9,466,260	\$4,892,305	\$14,358,565	65.9	\$3.88						

residual spraying man-hours (Classification 111), man-hours for field supervision, warehouse and shop personnel, and entomological evaluation as taken from supervisory man-hour reports (Classification 101).

³ Code for Method of Financing:

- 1--CDC and Local Government
- 2--CDC, Local Government, and State
- 3--CDC, Local Government, and Fees
- 4--CDC and Fees

⁴ Including travel allocations.

⁵ Budget and Fiscal Section report (3 months after close of fiscal year).

⁶ In addition to the obligations as reported by the Budget and Fiscal Section, this figure includes \$9,720 for a replacement shipment of DDT which was not charged to the allocation.