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## PHYSICAL IMPAIRMENTS OF MEMBERS OF LOW-INCOME FARM FAMILIES—11,490 PERSONS IN 2,477 FARM SECURITY ADMINISTRATION BORROWER FAMILIES, 1940<sup>1</sup>

### V. DEFECTS OF THE NASAL SEPTUM; AND CHRONIC RESPIRATORY AFFECTIONS, EXCLUSIVE OF DISEASED TONSILS

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This series of studies is based on physical examination findings for members of low-income farm families in the United States. The prevalence of impairments and chronic diseases as found for samples of our low-income farm population in eastern, central, and southern sections of the country will, it is hoped, be somewhat of a contribution to our knowledge of the normal individual in a population group for which there is little specific information of this sort at the present time. In the absence of a control urban group available data from other sources have been assembled for comparison with the physical examination findings for the low-income farm families.

#### SOURCE OF DATA

During the period November 1939 through November 1940 the Farm Security Administration made general physical examinations of the members of borrower families residing in selected areas in connection with the health aspects of their rehabilitation program. The physical examinations were conducted by physicians assembled mainly from colleges or universities located in the various sections. The same professional staff frequently worked in adjacent areas. Eye, ear, nose and throat examinations were made by appropriate

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This is the fifth in a series of papers dealing with physical defects found on examination of members of low-income farm families residing in 19 localities in the United States. The physical findings of the examinations were coded and transferred to punch cards by the Farm Security Administration under the direct supervision of Mr. Yaukey. The data were subsequently made available to the Public Health Service. Acknowledgment is made to Dr. S. D. Collins for critical suggestions and advice throughout the preparation of the studies.

specialists; children under 15 years of age were examined by pediatricians; the men by internists and the women by gynecologists. The mental age tests were conducted by groups of psychologists, and dentists made the dental examinations. The examinations were not made primarily for statistical purposes but rather to determine the health status of farmers and their families applying to the Farm Security Administration for rehabilitation loans. An effort was made to keep the examining procedure as uniform as possible but the results, on the whole, must be considered as representing an average opinion of a relatively small number of examining physicians.

The selected localities consisted, usually, of entire counties, and practically all Farm Security Administration borrower families residing within the selected counties came to the clinics for examination; among the white families represented at the clinics 91 percent of all members were examined. Thirteen of the selected areas were located in Southern States and six in Northern or Intermediate States. In nine of the Southern counties white and Negro families were examined, the examinations of both whites and Negroes being made by the same physicians. The data, therefore, seem favorable for a racial comparison. There may, however, have been some selection of Negro farmers on the basis of good physical condition since loans were made by the Farm Security Administration to farm operators only, and it is reasonable to expect that Negro farm operators are a somewhat more selected group than white operators.

The examined population (9,776 whites and 1,714 Negroes) has a comparatively young age distribution, due probably to the fact that relatively young heads of families were selected for rehabilitation loans. On the whole, the age distribution of the examined population does not differ widely in the various localities.

With respect to economic status the Bureau of Agricultural Economics estimates an average annual net income of \$767 per farm for all farms in 1940; while a comparable average annual net income for all rural rehabilitation farms, estimated by the Farm Security Administration, is \$500 in 1940, or approximately 35 percent less than that for all farms.

A somewhat more detailed account of the characteristics of the examined population can be obtained by reference to a preceding study (6) in this series.

#### DEFECTS OF THE NASAL SEPTUM

The nasal septum was recorded on the physical examination forms used by the Farm Security Administration as normal, deviated to the right or left, or perforated. No statement as to the degree of deviation was called for; and the records, therefore, include slight as well as marked deviations of the nasal septum, the limits between

slight and marked being set by individual examiners. Extreme abnormalities were recommended for surgical treatment.

The prevalence of deviated septum, and of deviated septum for which surgery was recommended, among white persons in each of 19 localities is shown in table 1. Only about 3 percent of the cases of deviated septum reported for persons over 15 years of age were recommended for surgical treatment. The records, therefore, include a large number of quite minor abnormalities. The recorded prevalence shows no particular relationship with geographic section; it is, however, associated with the examiner as seen in the following table:

*Prevalence of deviated septum among white persons 45 years and over as recorded by 4 different examiners*

NORTHERN COUNTIES

Examiner A		Examiner B	
County	Percent	County	Percent
Aroostook County, Maine.....	36.2	Howard County, Neb.....	56.6
Champaign County, Ohio.....	18.5	Phillips County, Colo.....	62.5
Callaway County, Mo.....	37.0		
Spotsylvania County, Va.....	16.7		

SOUTHERN COUNTIES

Examiner C		Examiner D	
County	Percent	County	Percent
Carroll County, Miss.....	58.2	Okfuskee County, Okla.....	8.4
Leflore County, Miss.....		Panola County, Tex.....	22.9
Humphreys County, Miss.....	76.5	Williamson County, Tex.....	6.6
Pope County, Ark.....	62.6	Runnels County, Tex.....	6.5
Franklin Parish, La.....			

The four physicians who made examinations of nose and throat in more than one locality clearly show a tendency to use different standards in recording minor abnormalities. In the two Southern groups of localities the differences between the percentages recorded by the two examiners are marked, while the differences between the percentages for localities examined by the same physician are less than or just about three times the probable error. That is, the differences between examiners are significant but between counties for the same examiner they are not significant or doubtfully so.

For a total of 19 localities (table 1) the recorded prevalence of deviated septum is comparatively infrequent under 15 years of age (13 percent). In the age groups 15 to 44 and 45 years and over, respectively, 37 and 39 percent of persons examined had a deviation of the nasal septum. Variability in the recorded percentages is extreme, from approximately 5 to 80 percent, with about half the localities showing recorded percentages of 30 to 65 percent. Only 0.9

TABLE 1.—Prevalence of deviated and perforated septum among white persons in 3 age groups—members of Farm Security Administration borrower families in 19 localities, 1940

Geographic area	State	County	Examined for defect of the nasal septum		Deviated septum					Perforated septum					
			Under 15	15-44	45 and over <sup>1</sup>	Total		Surgery recommended			Under 15	15-44	45 and over		
						Under 15	15-44	Under 15	15-44	45 and over					
Number													Defects per 100 persons examined		
New England	Maine	Aroostook	451	286	127	17.1	32.2	36.2	0.3	0.8	0.3	0.3	0.8		
East North Central	Ohio	Champaign	172	183	66	7.0	20.2	18.5	0.5	3.1	0.5	0.5	6.2		
	Indiana	Montgomery	132	136	67	3.8	80.9	83.6	0.8	0.8	0.7	0.7	3.0		
West North Central	Missouri	Callaway	283	231	118	2.1	21.6	37.0	0.4	1.7	2.5	2.5	7.2		
	Nebraska	Howard	248	218	83	16.3	47.2	56.6	0.4	0.6	0.6	0.6	1.2		
Mountain	Colorado	Phillips	162	165	64	9.9	57.6	62.5	0.6	2.8	2.8	2.8	1.6		
South Atlantic	Virginia	Spotsylvania	72	60	38	6.9	23.3	16.7	1.4	2.6	2.6	2.6	1.6		
	North Carolina	Avery	91	100	38	4.4	47.0	65.8	5.0	1.7	1.7	1.7	0.9		
	South Carolina	Kershaw	307	271	93	3.3	10.3	16.1	0.5	1.3	1.3	1.3	3.1		
	Georgia	Worth	277	209	60	3.0	34.0	31.7	0.5	1.9	1.9	1.9	0.9		
	Florida	Levy	198	237	114	5.0	33.3	43.0	0.5	2.6	2.6	2.6	3.1		
East South Central	Tennessee	Henderson	239	227	65	6.0	28.6	32.3	0.4	1.5	1.5	1.5	3.1		
	Mississippi	Carroll	191	164	55	25.7	47.6	58.2	12.0	18.3	18.3	18.3	25.6		
		Leflore	328	319	85	47.0	76.5	76.5	1.3	0.9	0.9	0.9	1.2		
West South Central	Arkansas	Humphreys	250	242	108	1.2	9.1	8.4	0.4	0.9	0.9	0.9	1.2		
	Oklahoma	Pope	466	394	105	33.9	64.1	62.6	1.3	0.8	0.8	0.8	2.1		
	Louisiana	Franklin	115	127	48	2.6	15.0	22.9	0.8	2.1	2.1	2.1	1.6		
	Texas	Panola	135	126	61	1.5	4.0	6.6	0.8	1.2	1.2	1.2	1.6		
		Williamson	122	126	62	1.8	10.3	6.5	0.8	1.2	1.2	1.2	1.6		
		Runnels	4,239	3,821	1,454	13.2	37.2	36.3	0.1	0.9	0.9	0.9	1.4		
19 localities															

<sup>1</sup> The range of the probable errors of the percentages with deviated septum is from 1.3 to 3.7 percent for the age group 15-44 years, and from 2.6 to 6.2 percent for the age group 45 years and over.

<sup>2</sup> Exclusive of Carroll, Leflore, and Humphreys Counties, Miss

and 1.3 percent of persons 15 to 44 and 45 years and over, respectively, had a deviation of the nasal septum marked enough for surgery to have been recommended.

Perforated septum was recorded for 0.2 and 1.4 percent of persons 15 to 44 and 45 or more years of age, respectively, in a total of all localities exclusive of Carroll, Leflore, and Humphreys Counties, Miss. Among the total of 95 cases of perforated septum, 67 cases or 71 percent occurred in the families examined in the three counties of Mississippi. The reason for the high recorded rate in this locality is unknown.

TABLE 2.—Prevalence of deviated septum among white persons in specific age groups—members of Farm Security Administration borrower families in a total of 19 localities, 1940

Age	Examined for defect of the nasal septum			Both sexes		Male		Female	
	Both sexes	Male	Female	Deviated septum		Deviated septum		Deviated septum	
				Total	Surgery recommended	Total	Surgery recommended	Total	Surgery recommended
	Number			Defects per 100 persons examined					
All ages.....	9,514	4,873	4,641	26.9	0.6	29.5	0.9	24.0	0.2
Under 5.....	1,159	559	600	3.4		3.2		3.5	
5-9.....	1,470	762	708	13.3		13.4		13.1	
10-14.....	1,610	831	779	20.4	.1	21.7	.1	19.0	
15-19.....	995	521	474	31.9		31.5		32.3	
20-24.....	500	201	299	33.0	.5	35.3	.7	31.4	.4
25-29.....	505	243	262	38.4		46.5		30.9	
30-34.....	616	284	332	40.4	1.4	44.7	2.5	36.7	.5
35-39.....	613	305	308	41.3		44.3		38.3	
40-44.....	592	306	286	41.0	1.1	49.0	1.8	32.5	.3
45-49.....	510	259	251	35.5		41.7		29.1	
50-54.....	416	251	165	42.1	1.1	45.8	1.8	36.4	.2
55-59.....	239	145	94	43.1		45.5		39.4	
60-64.....	149	109	40	45.0	.5	51.4	.8	27.5	
65 and over.....	140	97	43	32.9	1.4	35.1	2.1	27.9	

Tables 2 and 3 show the age-specific prevalence of deviated septum recorded for members of Farm Security Administration borrower families in a total of 19 localities and as recorded in comparable data for (a) school children in 8 counties of the eastern United States (3), (b) Life Extension Institute first check-up health examinations of policyholders (1, 8, 9), (c) members of Baltimore families and medical students reporting minor respiratory attacks to the John J. Abel Fund investigation of the common cold (4), and (d) National Youth Administration examinations (6). The Life Extension Institute (9) examinations show a prevalence rate of deviated septum for those examined at the head office in New York City which is 2.5 times the rate for those examined in other cities; agricultural workers have slightly lower rates than urban groups examined at other than the head office in New York City (see note 2, table 3). The differ-

TABLE 3.—Prevalence of deviated septum among white persons in specific age groups—data comparable with the Farm Security Administration examination of nasal septum

Age (years)	School children <sup>1</sup>		Life Extension Institute <sup>2</sup>				Balti- more <sup>4</sup>	National Youth Administration <sup>5</sup>	
			Male <sup>3</sup>			Total female <sup>3</sup>		Male	Female
	Boys	Girls	Total	New York City (head)	Other cities (field)		Both sexes		
	Percent								
Under 5.....									
5-9.....	1.3	1.1					21.9		
10-14.....	2.4	1.4							
15-19.....									
20-24.....			35.7	71.6	27.3	32.7	71.9	3.6	2.2
25-29.....			35.8	70.8	28.4				
30-34.....			36.3	73.0	29.5	34.6			
35-39.....			35.0	70.4	28.7	33.0			
40-44.....			34.4	71.5	28.4	32.2			
45-49.....			32.9	71.1	26.7	30.5			
50-54.....			30.9	63.7	26.0	28.1			
55-59.....			31.9	70.1	26.4	27.6			
60-64.....			27.6	62.9	23.3	29.5			
65 and over.....			26.3	63.5	21.8				

<sup>1</sup> From Collins (8), 1915-1925. Percentages are averages of 8 localities for the age groups 6-9 and 10-18 years. The prevalence of deviated septum (6-18 years) in each locality for both sexes combined is as follows: Frederick County, Md., 1.3 percent; Nassau County, N. Y., 1.2 percent; Spartanburg, S. C., 0.9 percent; Pinellas County, Fla., 0.3 percent; Orange County, Fla., 0.5 percent; Dunklin and New Madrid Counties, Mo., 0.3 percent; Du Page County, (a) 6.4 percent; and Du Page County (b) 1.9 percent.

<sup>2</sup> From Sydenstricker and Britten (9), 1922-1925. The prevalence of deviated septum for broad occupational classes of males examined at the head office (New York City) and in field offices is as follows:

Locality	Profes- sional	Business	Skilled trade	Agricul- tural
New York City (head office).....	71.6	71.3	71.6	-----
Other cities and agricultural (field offices).....	27.8	28.9	28.1	19.9

<sup>3</sup> From Britten (7), 1922-1925.

<sup>4</sup> From Gafaer (4), 1923-1930. The prevalence of deviated septum is given for two broad age groups, under 15 and 15 years and over for healthy persons participating in the John J. Abel research on the common cold.

<sup>5</sup> From McDowell and Meroney (6), 1941. Cases of marked deviation only were recorded; male percentages are for the age groups 16-20 and 21-24 years; female, 16-24 years.

ence in level between the rates as shown<sup>1</sup> for New York City<sup>2</sup> and other cities is probably due, according to the author's statement, to the close cooperation existing between examiners at the head office in New York City. The members of Baltimore families and medical students (4) were examined by the same individual or the same group of individuals and show a prevalence of deviated septum approximately equal to<sup>3</sup> that recorded for New York City. For ages over 20 years, both the New York City and Baltimore prevalence rates are approximately 75 percent higher than those recorded for members of Farm Security Administration borrower families. The rates for rural rehabilitation families are not uniform in the various localities, however, as shown in table 1, two of the localities having a higher prevalence of deviated septum than that recorded for New York or Baltimore.

Figure 1 shows the prevalence of deviated septum at specific ages; the rates being plotted on semilogarithmic paper. The prevalence of deviated septum as recorded in the Farm Security Administration examinations increases rapidly up to 30 years of age for males and up to 20 years of age for females; but remains practically constant throughout adult ages. The National Youth Administration (6) examinations and the Public Health Service (2) examinations of school children recorded only marked deviations of the nasal septum and show an increase in the rates up to 25 years; the Life Extension Institute (8) examinations for ages over 20 years show practically constant rates at those ages.

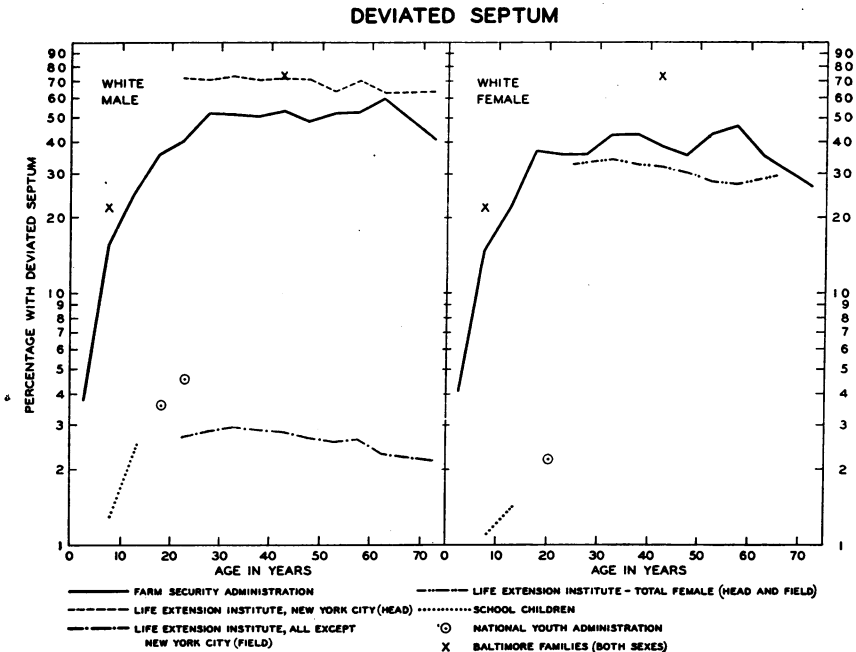


FIGURE 1.—Age-specific prevalence (logarithmic scale) of deviated septum—members of Farm Security Administration borrower white families in a total of 19 localities, 1940, and available data for other groups.

Tables 2 and 4 and figure 2 show a comparison of male and female prevalence of deviated septum. Among members of Farm Security Administration borrower families rates are the same for males and females under 20 years of age; during adult ages, however, rates for white males are on the average 30 percent higher than those for white females. Between the ages of 25 and 55 years, prevalence rates for deviated septum are approximately 30 percent higher for Negro males than females, but over 55 years of age they are practically the same for the two sexes. The Life Extension Institute (1) examinations (table 3) show rates for ages over 20 years that are only slightly higher for males than females. The National Youth Administration (6) examina-

tions give a prevalence rate of 3.8 percent for white males 16 to 24 years of age and 2.2 percent for females.

Table 4 and figure 3 show a comparison of the prevalence of deviated septum among whites and Negroes. For every age group and for both males and females the prevalence of deviated septum is markedly higher among whites than Negroes. For all ages combined, the rates for whites are approximately 2.5 times those for Negroes, the rela-

TABLE 4.—Prevalence of deviated septum among Negro and white persons in specific age groups—members of Farm Security Administration borrower families in a total of 9<sup>1</sup> localities, 1940

Age	Negro						White					
	Examined for defect of the nasal septum			Deviated septum			Examined for defect of the nasal septum			Deviated septum		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent			Number			Percent		
All ages.....	1,687	838	849	10.5	11.5	9.5	4,931	2,530	2,401	29.7	30.8	28.5
Under 5.....	199	99	110	2.0	2.2	1.8	584	277	307	5.0	4.7	5.2
5-14.....	585	299	286	8.5	9.7	7.3	1,620	842	778	22.2	22.9	21.3
15-24.....	326	158	168	12.3	11.4	13.1	828	390	438	35.0	29.7	39.7
25-34.....	134	54	80	11.9	13.0	11.3	589	282	307	41.9	46.8	37.5
35-44.....	171	65	106	14.6	18.5	12.3	606	306	300	44.1	47.1	41.0
45-54.....	159	94	65	15.7	19.1	10.8	452	263	189	36.9	38.8	34.4
55-64.....	82	58	24	12.2	8.6	20.8	189	126	63	44.4	50.0	33.3
65 and over.....	31	21	10	22.6	23.8	20.0	63	44	19	33.3	36.4	26.3

<sup>1</sup> The nine localities are: Spotsylvania County, Va., Kershaw County, S. C., Worth County, Ga., Levy County, Fla., parts of Carroll, Leflore and Humphreys Counties, Miss., Pope County, Ark., Okfuskee County, Okla., Franklin Parish, La., and Panola County, Tex.

DEVIATED SEPTUM

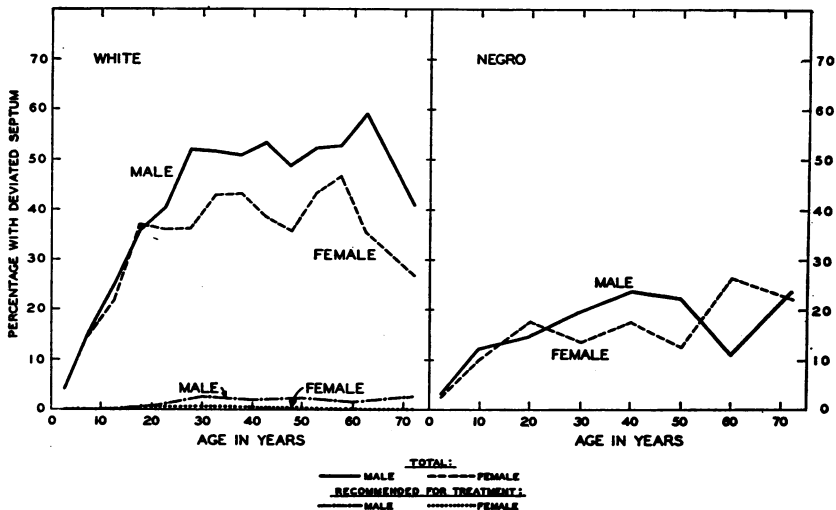


FIGURE 2.—Male and female age-specific prevalence of deviated septum as found on physical examination of members of Farm Security Administration borrower white families in a total of 19 localities, 1940.



tive difference being slightly more among females than males. A tabulation for separate localities shows a consistently low rate for Negroes compared with the white rate in every locality. The National Youth Administration (6) examinations give a prevalence rate for both sexes, 16 to 24 years of age, of 3.0 percent for whites and 0.7 percent for Negroes; or a white rate which is 4 times that of the Negro.

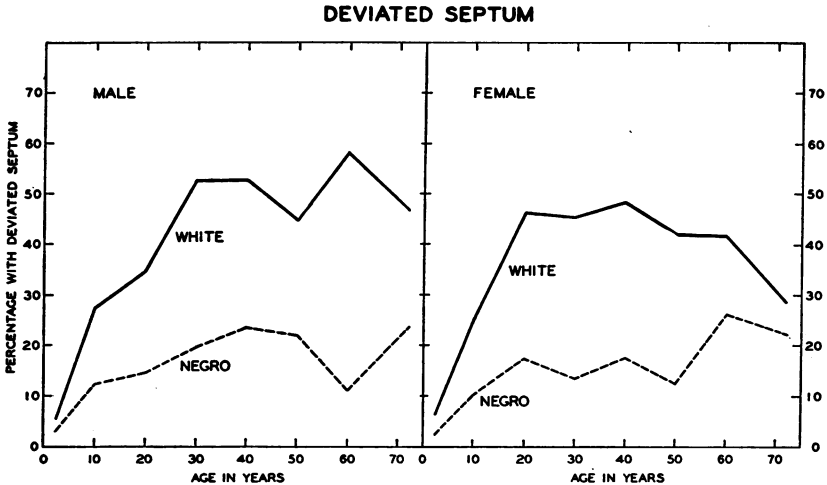


FIGURE 3.—Negro and white age-specific prevalence of deviated septum as found on physical examination of members of Farm Security Administration borrower families in a total of 9 localities, 1940.

#### OTHER CHRONIC RESPIRATORY AFFECTIONS

The prevalence of certain other defects and chronic diseases of the respiratory system exclusive of diseased tonsils is shown in table 5 for white males and females in a total of 11 localities for which the data have been tabulated, and for Negro males and females in a total of the 5 southern localities included. Several of the diseases show sex differences in prevalence which are outstanding and are possibly associated with the occupation of farming. The prevalence of asthma, chronic bronchitis, and pulmonary emphysema is significantly higher for males, being 5 or more times as frequent among males as females. Sinusitis is slightly more prevalent among males but not significantly so. For rates based on 5 localities there is no significant difference between Negro and white prevalence for any of the respiratory affections shown in table 5.

Regarding respiratory conditions, it is obvious that the method of physical examination does not give prevalence rates which are as complete for these chronic affections as for defects in a stricter sense of the word. Among the chronic conditions shown in tables 5 and 6 hay fever and bronchitis are probably less completely reported than asthma, pulmonary emphysema, or sinusitis.

*Hay fever and asthma.*—Cases tabulated as “hay fever” in these data include typical cases of hay fever due to sensitivity to the proteins of, mainly, pollens and animal emanations, and uncomplicated by asthma. The recorded rate for hay fever is less than 1 percent in each of the localities shown in table 5, the total of all

TABLE 5.—Prevalence of specific respiratory diseases among white and Negro males and females—members of Farm Security Administration borrower families, 1940

Sex, color, and locality	Total examined	Polyps of the nasal cavity	Hay fever	Asthma	Bronchitis		Pulmonary emphysema	Sinusitis
					Acute	Chronic		
	Number	Percent						
White male (11 localities).....	3,000	0.20	0.33	1.07	0.27	0.87	1.57	6.00
White female (11 localities).....	2,905	.21	.28	.21	.17	.07	.21	4.96
Negro male (5 localities) <sup>1</sup> .....	494	-----	-----	.81	-----	1.21	1.01	3.04
Negro female (5 localities) <sup>1</sup> .....	499	-----	-----	.20	-----	.20	-----	1.80
White male (5 localities) <sup>1</sup> .....	1,430	.07	.28	1.40	.21	1.54	2.38	2.24
White female (5 localities) <sup>1</sup> .....	1,360	.15	.07	.15	.29	.07	-----	.66
White (both sexes):								
Maine, Aroostook County.....	884	.11	.11	.57	.11	.11	.79	10.97
Ohio, Champaign County.....	429	1.17	.70	.70	.47	-----	.70	3.26
Indiana, Montgomery County.....	355	-----	.56	.28	.28	-----	.28	6.76
Missouri, Callaway County.....	675	.44	.44	.44	.30	-----	.30	20.00
Virginia, Spotsylvania County.....	172	-----	-----	1.74	-----	-----	-----	15.12
North Carolina, Avery County.....	239	-----	.84	1.26	-----	-----	.42	3.77
South Carolina, Kershaw County.....	679	.15	-----	.15	.44	1.33	1.77	-----
Florida, Levy County.....	539	-----	.17	.51	.51	2.02	3.54	.51
Tennessee, Henderson County.....	533	-----	.38	.19	-----	.75	1.13	.75
Arkansas, Pope County.....	745	.27	.27	.94	.13	.27	-----	1.07
Oklahoma, Okfuskee County.....	601	-----	.33	1.33	-----	-----	-----	.67
11 localities.....	5,905	.20	.30	.64	.22	.47	.90	5.49

<sup>1</sup> The 5 localities are: Spotsylvania County, Va.; Kershaw County, S. C.; Levy County, Fla.; Pope County, Ark., and Okfuskee County, Okla.

localities having a prevalence rate of 0.3 percent. Although the rates vary in the several localities the cases are fairly well scattered (table 5) and do not concentrate in those counties where examinations were made in the months of maximum incidence of hay fever (August and September).<sup>2</sup>

Other unpublished data available among our records also show an unexpectedly low prevalence or incidence of hay fever. Surveys conducted simultaneously in Cattaraugus County and Syracuse, N. Y. (10) and a survey made by the Committee on the Costs of Medical Care (3) in 130 localities give incidence rates for hay fever of approximately 0.4 and 0.2 percent, respectively, for all ages. The New York State survey shows no difference between the rates for Syracuse and the rural county area, 0.38 and 0.35 percent, re-

<sup>2</sup> Examinations were made during January in Pope County, Ark., during April in Avery County, N. C., and Kershaw County, S. C., during May in Levy County, Fla., during June in Champaign County, Ohio, during July in Montgomery County, Ind., during August in Aroostook County, Maine, Callaway County, Mo., Spotsylvania County, Va., and Okfuskee County, Okla., and during November in Henderson County, Tenn.

spectively, for all ages;<sup>3</sup> the Committee on the Costs of Medical Care survey shows a significantly higher incidence of hay fever in cities than in rural areas, 0.23 and 0.03 percent, respectively, for all ages.<sup>3</sup> It is quite possible that the urban and rural difference shown by the Committee on the Costs of Medical Care survey reflects better diagnosis in cities where there are relatively more allergy specialists.

The number of cases of hay fever reported among Farm Security Administration borrower families is too few for a reliable age-specific prevalence. The prevalence of cases of hay fever from the National Health Survey (7) and based on 26,120 cases of hay fever among 2,488,180 white and colored persons in 83 cities<sup>4</sup> is shown in figure 4. The National Health Survey was conducted in the winter, that is, not in the hay fever season, but includes all persons reported to have hay fever. Age-specific prevalence rates increase until approximately 30 years of age and remain constant or decline somewhat thereafter (fig. 4); approximately 1.5 percent of persons 35 to 44 years of age reported having had attacks of hay fever during the year. Among a group of medical officers of the United States Army, Navy, and Public Health Service and college faculty members and their families (11) making semimonthly reports of the incidence of colds to the United States Public Health Service 6.3 percent of persons 35 to 44 years of age stated that they had had attacks of hay fever at some time prior to the beginning of the study.<sup>3</sup> The age-specific prevalence of hay fever based on prior history of attack for members of medical officers' families is shown in figure 4 and resembles the age-specific prevalence of hay fever as given in the same figure for the National Health Survey, except that it is on a considerably higher level.

"Asthma" as applied to survey data usually includes asthma due to an allergy, as an accompaniment of chronic bronchitis and emphysema, or as an accompaniment of heart disease. Since the Farm Security Administration examinations of low-income farmers were made by physicians, the diagnosis of asthma was probably fairly uniform and consists largely of asthma due to an allergy. Among the 38 individuals whose records contained a diagnosis of asthma, only 2 were recorded as having hay fever; 1 emphysema; 1 both hay fever and emphysema; 1 chronic bronchitis; and 4 heart disease.

The age-specific prevalence of asthma found upon examination of members of Farm Security Administration borrower families is shown in table 6. No cases of asthma were reported under 5 years of age; after 5 years the prevalence rates increase at a moderate rate through-

<sup>3</sup> Unpublished data.

<sup>4</sup> In press.

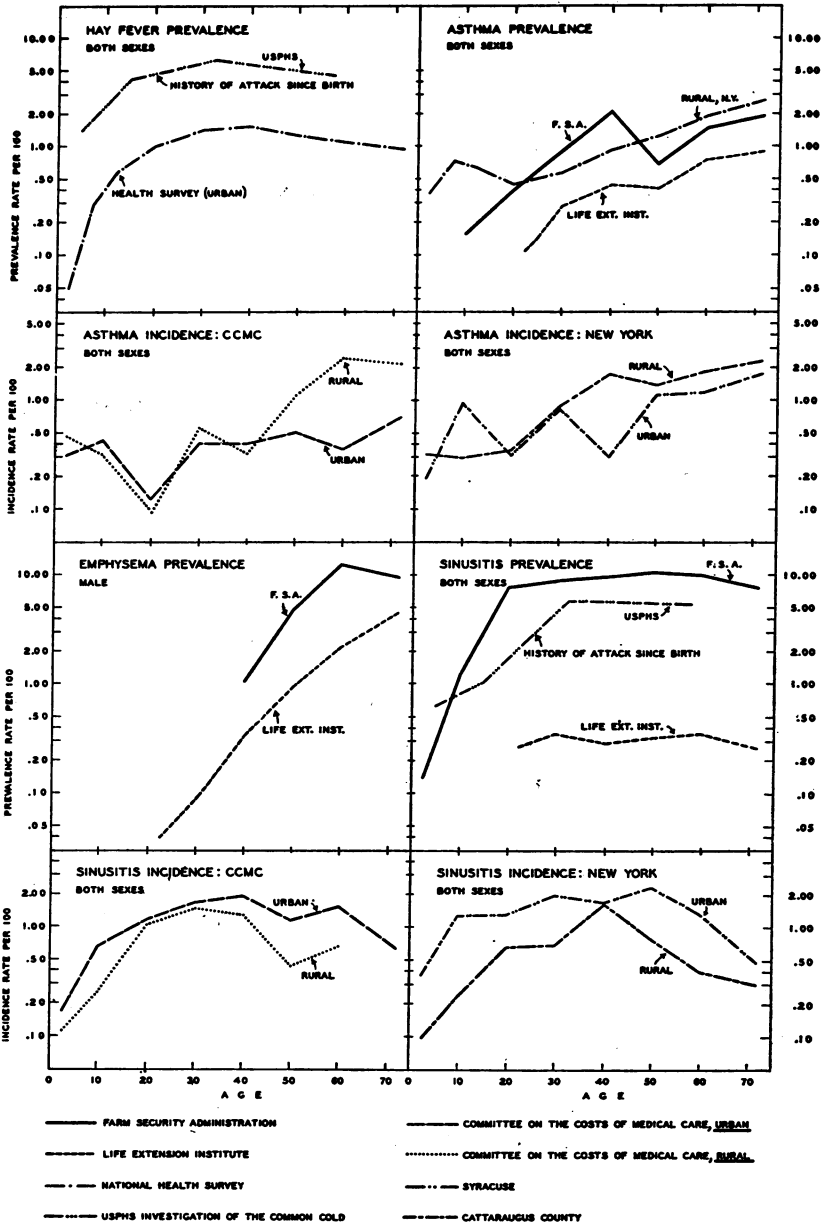


FIGURE 4.—Age-specific prevalence of hay fever, asthma, pulmonary emphysema and sinusitis among members of Farm Security Administration borrower white families, 1940, and available data of other groups; also the age-specific incidence (white) of asthma and sinusitis in urban and rural areas as recorded in New York State and by the Committee on the Costs of Medical Care Survey. (The data are unpublished with the exception of the Life Extension Institute (9) and the National Health Survey (in press).)

out life (fig. 4). In these data there is a peak in asthma prevalence at 40 years of age which is of doubtful significance. The age-specific prevalence of asthma recorded in the National Health Survey (7) and based on 22,742 cases of asthma among 2,498,180 white and colored persons in 83 cities <sup>4</sup> is shown in figure 4. In these data there is a peak in the prevalence of asthma at 5 to 9 years, followed by a decline until 20 years, and a continued increase at a moderate rate, after 20 years of age.

TABLE 6.—Prevalence of specified respiratory diseases among white persons in specific age groups—members of Farm Security Administration borrower families, 1940

Age	Total examined in 11 localities <sup>1</sup>			Hay fever			Asthma		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number			Percent					
All ages.....	5,905	3,000	2,905	0.30	0.33	0.28	0.64	1.07	0.21
Under 5.....	733	355	378						
5-14.....	1,837	944	893	.11	.11	.11	.16	.21	.11
15-24.....	991	475	513				.40	.84	
25-34.....	663	304	359	.30	.33	.28	.90	1.64	.28
35-44.....	726	363	363	1.52	1.65	1.38	2.07	3.31	.83
45-54.....	581	318	263	.52	.63	.38	.69	.94	.38
55-64.....	268	166	102				1.49	2.41	
65 and over.....	106	72	34				1.89	2.78	
	Sinusitis			Bronchitis (acute and chronic)			Pulmonary emphysema		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Percent								
All ages.....	5.49	6.00	4.96	.69	1.13	.24	.90	1.57	.21
Under 5.....	.14		.26						
5-14.....	1.25	.95	1.57	.11		.22			
15-24.....	7.67	9.83	5.65	.61	1.05	.19			
25-34.....	8.90	8.22	9.47	1.21	2.30	.28			
35-44.....	9.50	9.92	9.09	1.24	2.48		.69	1.10	.28
45-54.....	10.50	11.32	9.51	1.55	2.52	.38	2.93	4.72	.76
55-64.....	10.07	13.25	4.90	2.24	2.41	1.96	8.58	12.65	1.96
65 and over.....	7.55	6.94	8.82	.94	1.89		7.55	9.72	2.94

<sup>1</sup> The 11 localities are as given in table 5.

Urban and rural age-specific incidence of asthma is shown in figure 4 for Syracuse, N. Y. and 5 townships of Cattaraugus County, N. Y. (10) and for urban and rural areas from the data collected by the Committee on the Costs of Medical Care (3). Rates for all ages (including all sickness within the study year regardless of date of

<sup>4</sup> In press.

onset) are as follows: Syracuse, N. Y., 0.74 percent; Cattaraugus County, N. Y., 1.02 percent; Committee on the Costs of Medical Care, urban, 0.36 percent; and, rural, 0.54 percent.<sup>3</sup> Both the New York State survey and the Committee on the Costs of Medical Care show a higher incidence of asthma in rural than in urban areas; the difference is due mainly to high rates at ages over 40 or 50 years in rural areas (fig. 4). For the Life Extension Institute (9) examinations, white males aged 20 years and over show rates of 0.3 percent in New York City, 0.4 percent in other cities, and 0.7 percent in agricultural areas.

*Chronic bronchitis and emphysema.*—Although the recorded prevalence of chronic bronchitis is somewhat higher than acute bronchitis, 0.5 and 0.2 percent, respectively, inspection of table 5 indicates that considerable chronic bronchitis must have been missed on examination of the members of borrower families. Six of the 11 localities (table 5) reported no chronic bronchitis at all; 3 of the 6 reported some acute bronchitis and some emphysema; 2 reported no bronchitis or emphysema. Since, in the absence of an acute attack, the outstanding symptom of chronic bronchitis is a cough, which may vary with a number of factors including season, it is difficult to obtain a complete record of prevalence particularly by the physical examination method.

Chronic emphysema may usually be recognized by inspection and so is not as readily overlooked as chronic bronchitis. Among Life Extension Institute (9) examinations the prevalence of pulmonary emphysema for males 20 years of age and over is 1.0 percent for New York City, 0.4 percent for other cities, and 0.5 percent for agricultural workers. Members of low-income farm families examined by the Farm Security Administration show a prevalence rate of 3.4 percent for males 20 years of age and over. At 55 years of age and over, 11.8 percent of males examined by the Farm Security Administration showed signs of having chronic emphysema. The relative age-specific prevalence of chronic emphysema is shown in figure 4.

*Sinusitis.*—In Farm Security Administration examinations each recorded case of sinusitis was diagnosed by the examining physician as present at the time of examination. However, a complete record of the method of examination was not kept; transillumination of the sinuses was done routinely in some localities, although probably not in all; X-ray of the sinuses was not done in any of the localities.

The prevalence of sinusitis shows a marked association with geographic section (table 5); the more southern localities have prevalence rates for whites of 1 percent or less compared with an average rate of 5.5 percent for the 11 localities combined. Prevalence rates of sinusitis found for members of Farm Security Administration borrower

<sup>3</sup> Unpublished data.

families in northern localities and for members of Baltimore families and students participating in the John J. Abel research on the common cold (4) examined both by transillumination and by X-ray are shown in the following table:

Age	Farm Security Administration <sup>1</sup> —sinusitis (acute and chronic)		Baltimore—sinuses cloudy	
	Actual	Adjusted <sup>2</sup>	By transillumination	By X-ray
	Percent			
Under 15.....	2.29	1.46	4.8	31.2
15 and over.....	19.03	18.18	10.7	16.8

<sup>1</sup> The localities included are: North.—Aroostook County, Maine, Champaign County, Ohio, Montgomery County, Ind., and Callaway County, Mo.

<sup>2</sup> From Gaiser (4) 1928-30.

<sup>3</sup> Adjusted to the age distribution of the examined members of Baltimore families and students.

The recorded prevalence of sinusitis in Baltimore is somewhat lower than that for northern Farm Security Administration borrower families. Since the Baltimore-examined population was heavily weighted by students 20 to 29 years of age, when sinusitis rates have not reached their peak, the actual rates of the Farm Security Administration have been adjusted to the age distribution of the examined Baltimore population. This age adjustment lowers the actual Farm Security Administration rates somewhat; the age adjusted prevalence for 15 years and over in northern localities, however, remains significantly higher than the rates for Baltimore, where examination was by transillumination of the sinuses. The Life Extension Institute (9) examinations give prevalence rates of 0.6 percent for New York City, 0.3 percent for other cities; and 0.3 percent for agricultural workers 20 years and over; or prevalence rates which are approximately one-thirtieth of the low-income farm prevalence (10.2 percent for males 20 years and over). Among a group of medical officers of the United States Army, Navy, and Public Health Service and College faculty members and their families (11) 5.6 percent 20 years and over stated that they had had sinusitis at some time prior to being questioned.<sup>3</sup> Although the recorded prevalence of sinusitis is somewhat high for members of low-income farm families, compared with other available data, it is difficult to say to what extent the difference might be due to such factors as locality or method of examination. Age-specific prevalence of sinusitis (fig. 4) shows that the rates increase rapidly up to 20 years of age, continue to increase slowly until 50 years, and decline slowly thereafter.

<sup>1</sup> Unpublished data.

## SUMMARY

The prevalence of deviated septum and chronic respiratory affections exclusive of diseased tonsils recorded for Farm Security Administration examinations of rural rehabilitation farmers and their families is presented and compared with available data.

Slight as well as marked deviations of the nasal septum have been included in the records although the extent of the deviation recorded obviously varies with individual medical examiners. The actual prevalence of deviated septum among members of Farm Security Administration borrower families in a total of 19 localities is approximately 40 percent for persons (both sexes) over 20 years of age, or considerably lower than that recorded for examinations made in New York City (male) and Baltimore (both sexes) which showed a prevalence of approximately 70 percent; for members of Farm Security Administration borrower families, however, a prevalence of 75 or 80 percent was recorded for some individual localities. The relative age prevalence of deviated septum in these data is similar to that reported elsewhere; there is a rapid rate of increase in the rates up to 30 years of age and a constant rate thereafter. A higher prevalence of deviated septum was recorded for males than females; and also a higher rate among whites than Negroes.

Among the chronic affections of the respiratory system here dealt with, the reported prevalence of hay fever and chronic bronchitis are thought to be little more than a record of attacks of chronic diseases present at the time of examination. Asthma and chronic bronchitis and emphysema are recorded as five or more times as frequent among males as females. The prevalence of asthma among low-income farmers is not greatly different from that recorded for other groups. At ages over 55 years 12 percent of white males showed signs of chronic pulmonary emphysema, which is a significantly higher prevalence than the Life Extension Institute records for either urban or agricultural groups. Sinusitis prevalence shows a definite association with geographic section, the North having the higher rates. The recorded prevalence of sinusitis is somewhat high among members of low-income farm families compared with available data for other groups, but it is difficult to say to what extent the prevalence of sinusitis is influenced by such factors as climate.

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## THE EFFECT OF TOPICALLY APPLIED SODIUM FLUORIDE ON DENTAL CARIES EXPERIENCE. II. REPORT OF FINDINGS FOR SECOND STUDY YEAR<sup>1 2</sup>

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In a previous report (1) data were presented for the year ending May 1943 on the incidence of dental caries in the permanent teeth of 2 groups of children. The 289 children in the first of these groups received 7 to 15 topical applications of 2-percent sodium fluoride solution to the teeth in the upper left and lower left quadrants of the mouth. The second group, consisting of 326 control children, did not receive the fluoride treatments. Analysis of the data indicated (1) the number of previously undecayed teeth attacked by caries during the study year was approximately 40 percent less in fluoride-treated than in untreated teeth, and (2) the number of additional tooth surfaces attacked in previously decayed teeth was less but not significantly less in treated than in untreated carious teeth.

<sup>1</sup> From the States Relations Division, U. S. Public Health Service, Washington, D. C., in cooperation with the Minnesota Department of Health, Minneapolis, Minn., and the Laboratory of Dental Research and Division of Physiological Chemistry, University of Minnesota, Minneapolis, Minn.

<sup>2</sup> The Council on Dental Therapeutics of the American Dental Association and the American College of Dentists furnished grants which were used to defray part of the expenses of this investigation.

It is the purpose of this report to present data on the dental caries experience in the permanent teeth of these two groups of children for the second study year and for the 2-year period ending May 1944. Briefly, analysis of the data indicates that during both these time periods initial caries attack on fluoride-treated teeth continued to be approximately 40 percent less than on untreated teeth. Furthermore, the number of additional tooth surfaces attacked in previously decayed teeth not only continued to be less in treated than in untreated carious teeth but the magnitude of the difference was appreciably increased during the second year.

#### MATERIAL AND METHODS

The children participating in this study comprise a part of the school populations of North Mankato, Arlington, and St. Louis Park, 3 small urban centers in Minnesota. The ages of the children at the time the study was begun varied from 7 to 15 years. The treated group, originally consisting of 337 children, received topical fluoride applications to the teeth in the left quadrants of the mouth. The teeth in the right or untreated mouth quadrants served as direct controls. An additional group of children, originally consisting of 392 children enrolled in the same schools as the treated children, did not receive fluoride treatments and served as additional controls.

During an 8-week period in April and May 1942, each child in the study groups received a dental prophylaxis and a detailed dental examination. In addition the children in the treated group received 7 to 15 topical applications of fluoride to the teeth in the left quadrants of the mouth. The fluoride treatment procedure consisted of isolation of the teeth with cotton rolls, drying the teeth with compressed air, and wetting the crown surfaces of the teeth with 2-percent sodium fluoride solution. The applied solution was allowed to dry in air for approximately 4 minutes. During the 8-week treatment period, roughly two-thirds of the children in the treated group received 2 fluoride applications weekly to a maximum of 15 and the remaining third received 1 application weekly to a maximum of 8 treatments.

The fluoride treatments were completed in May 1942. At yearly intervals thereafter, the teeth of the children in both the treated and control groups have been re-examined. All dental examinations have been made by one of us (J. W. K.). The treated and control children in any one school were randomly examined. Variations in the numbers of children in each study group are due to changes in residence, absence from school at the time re-examinations were conducted or discontinuance of attendance at school. The analysis, throughout, is confined to the dental caries experience in the erupted permanent teeth present at the beginning of the study.

## FINDINGS

The caries experience in the permanent teeth of the treated group of children for the 2-year period ending May 1944 is presented, by mouth quadrants, in table 1. Caries experience is expressed in terms of numbers of teeth and tooth surfaces initially attacked during this time period and numbers of additional tooth surfaces attacked in teeth which were carious at the time the first dental examination was made.

TABLE 1.—*Treated group. Dental caries experience during the 2-year period ending May 1944, for the permanent teeth in the fluoride-treated and untreated quadrants of the jaws of 270 Minnesota children*

Quadrant	Number of noncarious teeth (April 1942)	New DF <sup>1</sup> teeth (May 1944)	DF surfaces in new DF teeth	New DF surfaces in previously carious teeth	Total new DF surfaces
Upper					
Treated (left).....	929	97	115	94	209
Untreated (right).....	940	173	214	120	334
Lower					
Treated (left).....	1145	67	83	89	172
Untreated (right).....	1154	107	131	118	249

<sup>1</sup> DF—Carious (decayed or filled).

According to the data in table 1, only 97 teeth became carious in the upper left or fluoride-treated quadrant whereas 173 teeth became carious in the upper right or untreated quadrant. For the teeth in the lower mouth quadrants, 67 became carious in the left and 107 in the right quadrant. The total number of new carious teeth in both treated quadrants is 164 and for both untreated quadrants is 280. This is a gross difference of 41.4 percent less teeth attacked by caries in the treated than in the untreated teeth and compares closely with the 39.8 percent difference reported (1) for the year ending May 1943.

Comparison of the number of tooth surfaces attacked by caries in teeth which were noncarious at the time of treatment (table 1) yields results closely in accord with the results of the foregoing comparisons made on the basis of new carious teeth.

Continuing the examination of the data in table 1, the numbers of tooth surfaces which became carious in previously carious teeth are appreciably less in the treated quadrants than in the untreated quadrants—94 in the treated and 120 in the untreated upper teeth, and 89 in the treated and 118 in the untreated lower teeth. These particular findings indicate that the fluoride treatment of carious teeth reduces attack on additional surfaces approximately 20 percent.

In general the findings for the 2-year period of observations are in accord with the findings reported (1) for the first year. The only notable difference is an appreciable increase in the difference between the number of additional tooth surfaces attacked in treated as compared with untreated teeth which were carious at the time the study was begun. It is apparent therefore that the caries-inhibiting effect of the topical fluorides is fully as effective during the second year following treatment as during the first year. A direct check on this conclusion is afforded by a separate analysis of the data on the caries experience in the teeth of the treated group for the second year.

TABLE 2.—*Treated group. Dental caries experience during the year ending May 1944, for the permanent teeth in the fluoride-treated and untreated quadrants of the jaws of 260 Minnesota children.*

Quadrant	Number of noncarious teeth (May 1943)	New DF <sup>1</sup> teeth (May 1944)	DF surfaces in new DF teeth	New DF surfaces in previously carious teeth	Total new DF surfaces
Upper					
Treated (left).....	342	43	48	70	118
Untreated (right).....	816	83	100	86	186
Lower					
Treated (left).....	1,061	27	30	40	70
Untreated (right).....	1,055	48	55	61	116

<sup>1</sup> DF—Caries (decayed or filled).

The numbers of permanent teeth that were noncarious in May 1943 and the number of these that became carious during the year ending May 1944 are presented for the treated group of children in table 2. The caries experience in terms of tooth surfaces is also given. According to these data, 43 teeth in the upper left or treated quadrant and 83 in the upper right or untreated quadrant were initially attacked by caries during this particular year, a difference of 48.2 percent less caries in the treated than in the untreated upper teeth. In the lower jaw 27 teeth in the left and 48 in the right quadrant became carious, a difference of 43.8 percent. These differences are slightly greater than those observed for either the 2-year period ending May 1944 (table 1) or those observed for the first study year (1) and confirm the conclusion that the fluoride treatment is fully as effective during the second year as during the first year following treatment.

A summary of the percentages by which the caries experience in the fluoride-treated teeth was lower than that observed in untreated teeth is presented in table 3 for the separate time periods of the study.

Inasmuch as the control aspect of this study is based on the bilaterally equal occurrence of dental caries usually observed in popu-

lation groups, it becomes important to check this characteristic in the control group of children. The dental caries experience in the teeth of the control group of children is presented in table 4. Examination of the data in this table shows that 253 teeth in the upper left and 254 in the upper right quadrant were attacked by caries. In the lower jaw, 137 teeth in the left and 137 in the right quadrant became carious. These findings are remarkably in agreement with the observed phenomenon that caries normally occurs bilaterally equal in population groups.

TABLE 3.—*Treated group. Percent less new caries experience in the fluoride-treated jaw quadrants (left) than in the untreated quadrants (right) of a selected group of Minnesota children*

Year	Upper jaw	Lower jaw	Both jaws
Percent less new carious teeth			
1942-43.....	46.0	30.3	39.8
1943-44.....	48.2	43.8	46.6
1942-44.....	43.9	37.4	41.4
Percent less new carious surfaces in previously decayed teeth			
1942-43.....	14.0	11.1	12.4
1943-44.....	18.6	34.4	25.2
1942-44.....	21.7	24.6	23.1

TABLE 4.—*Control group. Dental caries experience during the 2-year period ending May 1944, for the permanent teeth in the left and right quadrants of the jaws of 320 Minnesota children*

Quadrant	Number of noncarious teeth (April 1942)	New DF <sup>1</sup> teeth (May 1944)	DF surfaces in new DF teeth	New DF surfaces in previously carious teeth	Total new DF surfaces
Upper					
Left.....	1,322	253	332	172	504
Right.....	1,317	254	339	193	532
Lower					
Left.....	1,465	137	180	191	371
Right.....	1,489	137	199	188	387

<sup>1</sup> DF—Carious (decayed or filled).

#### SUMMARY

Data on the incidence of dental caries in the permanent teeth of a treated group of children and a control group of children for the second year of a longitudinal study have been presented and analyzed. The data for the first study year have been reported previously. During an 8-week period, April and May 1942, the children in the treated group received 7 to 15 topical applications of sodium fluoride

solution to the teeth in the left quadrants of the mouth. Analysis of the data indicates:

1. During the 2-year period ending May 1944, 41.3 percent less teeth became carious of the fluoride-treated than of the untreated teeth of the treated group of children. The number of additional tooth surfaces which became decayed in teeth which were carious at the beginning of the study was 23.1 percent less in treated than in untreated carious teeth.

2. During the second study year, the year ending May 1944, 46.6 percent less treated teeth became carious than untreated teeth. The number of additional surfaces which became decayed in previously carious teeth was 25.2 percent less in treated than in untreated carious teeth.

3. By and large the findings confirm those reported for the first study year. In addition it is indicated that the fluoride treatments are fully as effective in inhibiting dental caries during the second year following treatment as during the first year. Further, the evidence suggests that the treatment of carious teeth reduces approximately 20 percent the liability to attack on additional surfaces.

4. The incidence of caries in the permanent teeth of the control group of children, by mouth quadrants, was strikingly similar in the two upper quadrants and also in the two lower mouth quadrants.

The foregoing results of this initial or pilot study on the caries-inhibiting effect of topically applied fluorides are sufficiently encouraging to justify additional and more stringently controlled studies. One such study designed to test the relative effectiveness of different numbers of treatments is now in progress and plans for conducting others are being made.

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### INCIDENCE OF HOSPITALIZATION, JULY 1945

Through the cooperation of the Hospital Service Plan Commission of the American Hospital Association, data on hospital admissions among members of Blue Cross Hospital Service Plans are presented monthly. These plans provide prepaid hospital service. The data cover hospital service plans scattered throughout the country, mostly in large cities.

Item	July	
	1944	1945
1. Number of plans supplying data.....	73	79
2. Number of persons eligible for hospital care.....	13,664,738	18,044,754
3. Number of persons admitted for hospital care.....	129,769	179,472
4. Incidence per 1,000 persons, annual rate, during current month (daily rate × 365).....	112.2	117.7
5. Incidence per 1,000 persons, annual rate for the 12 months ended July 31, 1945....	105.2	105.5
6. Number of plans reporting on hospital days.....	20	32
7. Days of hospital care per case discharged during month <sup>1</sup> .....	6.95	7.12

<sup>1</sup> Days include entire stay of patient in hospital whether at full pay or at a discount.

# PREVALENCE OF DISEASE

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*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

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## UNITED STATES

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### REPORTS FROM STATES FOR WEEK ENDED AUGUST 25, 1945

#### Summary

The total of 931 cases of poliomyelitis reported, as compared with 694 last week, represents an increase of 237 cases—the largest numerical weekly increase this year. For the corresponding week last year 1,530 cases were reported, representing an increase of 276 cases for the week. The corresponding 5-year (1940–44) median is 623. Increases occurred in all geographic areas except the East South Central and the Pacific. The largest increases were reported in the Middle Atlantic and East North Central groups, where 57 percent of the total for the week occurred. Increases occurred in all but 5 of the 22 States reporting 10 or more cases each. They are as follows (last week's figures in parentheses): *Increases*—Massachusetts 37 (22), Connecticut 16 (13), New York 191 (110), New Jersey 88 (72), Pennsylvania 65 (50), Ohio 30 (15), Illinois 121 (77), Michigan 13 (10), Wisconsin 15 (3), Minnesota 14 (9), Iowa 19 (7), District of Columbia 17 (12), North Carolina 11 (6), South Carolina 17 (11), Texas 73 (55), Colorado 12 (7), Utah 14 (8); *decreases*—Indiana 10 (16), Virginia 20 (25), Tennessee 24 (36), Washington 16 (22), California 24 (25).

Since June 30 of this year, 3,938 cases have been reported, as compared with 6,790 and 3,846, respectively, for the corresponding periods of 1944 and 1943. The total to date is 5,209, as compared with 7,792 last year, 4,930 in 1943, and a 5-year median for the period of 3,438.

Of the total of 91 cases of meningococcus meningitis reported, as compared with 159 for the corresponding week last year and a 5-year median of 58, only 4 States reported more than 6 cases each. The total to date this year is 6,267, as compared with 13,248 for the corresponding period last year, and a 5-year median of 2,454.

Of 508 reported cases of dysentery, undefined, Virginia reported 431. Of the total of 665 cases of bacillary dysentery, Texas reported 467, Arkansas 59, Connecticut 43, and South Carolina 41. To date this year a total of 24,532 cases of dysentery, all forms, has been reported, as compared with 21,105 for the same period last year.

A total of 8,557 deaths was recorded for the week in 93 large cities of the United States, as compared with 7,642 last week, 7,472 for the corresponding week last year, and a 3-year (1942–44) average of 7,602. The total to date this year is 308,436, as compared with 312,399 for the same period last year.

*Telegraphic morbidity reports from State health officers for the week ended August 25, 1945, and comparison with corresponding week of 1944 and 5-year median*

In these tables a zero indicates a definite report, while leaders imply that, although none was reported, cases may have occurred.

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44
	Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944	
<b>NEW ENGLAND</b>												
Maine.....	0	0	0	-----	2	-----	1	5	5	0	0	0
New Hampshire.....	0	0	0	-----	-----	-----	0	2	2	1	0	0
Vermont.....	0	0	0	-----	-----	-----	2	5	5	1	0	0
Massachusetts.....	2	1	2	-----	-----	-----	48	40	55	0	4	4
Rhode Island.....	0	1	0	30	-----	-----	0	0	4	0	0	0
Connecticut.....	0	0	0	-----	-----	-----	5	18	11	0	2	1
<b>MIDDLE ATLANTIC</b>												
New York.....	13	5	7	11	(1)	(1)	26	51	90	12	31	6
New Jersey.....	2	0	1	2	-----	2	11	21	36	2	7	5
Pennsylvania.....	6	6	6	-----	3	-----	22	22	24	6	11	6
<b>EAST NORTH CENTRAL</b>												
Ohio.....	5	9	6	-----	3	3	5	5	18	6	5	2
Indiana.....	4	3	3	3	4	4	4	4	4	0	3	2
Illinois.....	2	3	8	-----	5	2	58	14	24	10	13	3
Michigan <sup>1</sup> .....	6	8	5	-----	1	1	30	32	35	3	4	2
Wisconsin.....	0	6	2	11	10	10	83	51	76	6	4	1
<b>WEST NORTH CENTRAL</b>												
Minnesota.....	7	2	2	-----	-----	1	2	6	6	1	2	0
Iowa.....	1	0	4	-----	-----	-----	2	3	5	2	3	2
Missouri.....	1	2	2	-----	2	1	4	4	7	2	10	2
North Dakota.....	5	0	0	4	-----	-----	3	1	1	0	0	0
South Dakota.....	2	0	2	-----	-----	-----	0	1	2	0	0	0
Nebraska.....	4	1	1	-----	15	2	2	1	1	0	1	0
Kansas.....	10	1	2	-----	-----	-----	5	11	11	0	1	1
<b>SOUTH ATLANTIC</b>												
Delaware.....	0	0	0	-----	-----	-----	0	1	0	0	0	0
Maryland <sup>2</sup> .....	10	3	3	-----	1	3	1	4	4	1	1	2
District of Columbia.....	0	0	0	-----	-----	-----	0	1	2	0	0	0
Virginia.....	7	8	9	147	47	58	6	5	22	3	1	1
West Virginia.....	5	4	4	-----	-----	1	0	1	1	0	0	1
North Carolina.....	33	16	16	-----	-----	-----	1	20	14	5	2	0
South Carolina.....	15	11	11	101	86	117	7	10	14	1	3	0
Georgia.....	22	7	10	2	7	7	2	3	3	0	3	0
Florida.....	2	12	2	1	1	2	3	72	2	0	1	0
<b>EAST SOUTH CENTRAL</b>												
Kentucky.....	12	7	6	-----	2	-----	10	2	6	0	1	0
Tennessee.....	6	6	6	5	3	8	1	4	5	2	6	1
Alabama.....	26	31	14	24	2	4	1	7	7	3	10	2
Mississippi <sup>2</sup> .....	11	5	5	-----	-----	-----	-----	-----	-----	2	3	0
<b>WEST SOUTH CENTRAL</b>												
Arkansas.....	2	5	7	4	10	2	2	6	8	2	0	0
Louisiana.....	5	5	5	15	-----	1	1	0	1	1	2	0
Oklahoma.....	4	1	2	12	-----	6	3	0	4	0	0	0
Texas.....	56	18	18	522	251	250	44	33	33	9	8	2
<b>MOUNTAIN</b>												
Montana.....	0	0	1	-----	10	-----	2	1	5	0	0	0
Idaho.....	0	0	0	1	-----	-----	14	0	0	0	0	0
Wyoming.....	0	0	0	-----	-----	-----	3	0	3	0	0	0
Colorado.....	3	9	7	18	2	5	6	1	8	2	1	0
New Mexico.....	7	7	1	-----	1	-----	0	1	2	0	0	0
Arizona.....	2	1	0	17	19	19	4	8	11	0	1	0
Utah <sup>2</sup> .....	1	0	0	-----	1	-----	50	5	6	0	0	0
Nevada.....	0	0	0	-----	-----	-----	0	0	0	0	0	0
<b>PACIFIC</b>												
Washington.....	4	0	0	-----	2	-----	42	19	19	0	6	1
Oregon.....	3	2	2	1	-----	-----	5	46	15	0	2	1
California.....	12	18	8	8	7	13	129	149	101	8	7	3
Total.....	318	224	218	929	500	500	650	696	879	91	159	58
34 weeks.....	8,610	7,007	7,623	71,661	339,178	169,606	101,897	591,654	538,338	6,267	13,245	2,454

<sup>1</sup> New York City only.  
<sup>2</sup> Period ended earlier than Saturday.  
<sup>3</sup> Corrected cumulative total.



**Telegraphic morbidity reports from State health officers for the week ended August 25, 1945, and comparison with corresponding week of 1944 and 5-year median—Con.**

Division and State	Pollomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever <sup>1</sup>		
	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44	Week ended—		Median 1940-44
	Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944		Aug. 25, 1945	Aug. 26, 1944	
<b>NEW ENGLAND</b>												
Maine.....	4	2	2	18	4	4	0	0	0	2	2	0
New Hampshire.....	4	8	0	8	2	2	0	0	0	0	0	0
Vermont.....	1	2	1	4	0	1	0	0	0	0	0	0
Massachusetts.....	37	43	8	35	41	36	0	0	0	8	8	5
Rhode Island.....	0	1	1	4	2	2	0	0	0	1	0	0
Connecticut.....	16	19	7	6	10	5	0	0	0	2	0	1
<b>MIDDLE ATLANTIC</b>												
New York.....	191	581	42	78	37	46	0	0	0	13	15	15
New Jersey.....	88	36	25	22	8	15	0	0	0	9	0	4
Pennsylvania.....	65	139	9	34	30	30	0	0	0	7	11	15
<b>EAST NORTH CENTRAL</b>												
Ohio.....	30	97	44	55	51	51	0	0	0	1	7	7
Indiana.....	10	16	16	14	9	9	0	0	0	1	1	2
Illinois.....	121	38	23	52	32	37	0	0	0	7	4	9
Michigan <sup>2</sup> .....	13	94	11	69	30	27	2	0	0	3	3	4
Wisconsin.....	15	26	8	30	23	28	0	0	0	2	1	0
<b>WEST NORTH CENTRAL</b>												
Minnesota.....	14	57	10	19	20	14	0	0	0	0	0	0
Iowa.....	19	15	13	9	14	9	0	0	0	13	3	3
Missouri.....	8	10	10	15	8	8	0	0	0	0	7	10
North Dakota.....	0	7	2	8	0	0	0	0	0	1	0	0
South Dakota.....	0	0	0	2	2	2	0	0	0	0	0	0
Nebraska.....	5	9	9	8	1	3	2	1	0	0	0	0
Kansas.....	3	6	6	16	9	16	0	0	0	0	4	4
<b>SOUTH ATLANTIC</b>												
Delaware.....	1	5	1	0	3	2	0	0	0	0	1	1
Maryland <sup>2</sup> .....	9	40	3	11	9	9	0	0	0	0	3	6
District of Columbia.....	17	27	1	10	2	3	0	0	0	1	2	2
Virginia.....	20	63	6	29	18	12	0	0	0	4	4	8
West Virginia.....	7	17	4	23	24	20	0	0	0	2	5	6
North Carolina.....	11	46	4	35	30	22	0	0	0	3	3	8
South Carolina.....	17	5	4	8	4	5	0	0	0	5	3	5
Georgia.....	2	7	1	8	7	7	0	0	0	9	8	15
Florida.....	2	4	2	3	3	3	0	0	0	4	2	3
<b>EAST SOUTH CENTRAL</b>												
Kentucky.....	4	38	18	22	6	17	1	0	0	5	8	11
Tennessee.....	24	9	9	22	15	14	0	0	0	15	5	6
Alabama.....	5	7	5	9	13	14	0	1	0	8	6	6
Mississippi <sup>2</sup> .....	4	2	2	5	6	6	0	1	0	3	6	6
<b>WEST SOUTH CENTRAL</b>												
Arkansas.....	2	1	1	5	6	3	0	2	0	*3	3	12
Louisiana.....	4	2	2	5	5	3	0	0	0	2	7	7
Oklahoma.....	7	1	1	5	3	4	0	0	0	4	10	10
Texas.....	73	7	7	32	21	18	0	0	0	33	30	30
<b>MOUNTAIN</b>												
Montana.....	1	2	0	4	9	9	0	0	0	3	0	0
Idaho.....	0	0	0	3	3	2	0	0	0	0	2	1
Wyoming.....	2	2	1	1	4	2	0	0	0	0	0	0
Colorado.....	12	7	2	5	3	6	0	0	0	1	2	2
New Mexico.....	3	2	2	3	3	2	0	0	0	1	5	4
Arizona.....	3	0	1	0	2	1	0	0	0	3	4	1
Utah <sup>2</sup> .....	14	3	3	7	11	2	0	0	0	2	1	1
Nevada.....	0	0	0	0	0	0	0	0	0	0	0	0
<b>PACIFIC</b>												
Washington.....	16	5	5	9	26	10	0	0	0	0	1	0
Oregon.....	3	12	3	5	14	11	0	0	0	2	3	2
California.....	24	10	13	85	60	45	0	0	0	1	4	4
<b>Total.....</b>	<b>931</b>	<b>1,530</b>	<b>623</b>	<b>865</b>	<b>647</b>	<b>588</b>	<b>5</b>	<b>5</b>	<b>3</b>	<b>184</b>	<b>190</b>	<b>242</b>
<b>34 weeks.....</b>	<b>5,209</b>	<b>7,792</b>	<b>3,438</b>	<b>135,413</b>	<b>148,239</b>	<b>98,496</b>	<b>270</b>	<b>305</b>	<b>614</b>	<b>*2,918</b>	<b>3,447</b>	<b>4,267</b>

<sup>2</sup> Period ended earlier than Saturday.

<sup>1</sup> Including paratyphoid fever reported separately, as follows: Massachusetts 7; New York 4; New Jersey 1; Georgia 1; Texas 6; Arizona 1.

<sup>2</sup> Correction: Arkansas, week ended August 4, typhoid fever, 5 cases (instead of 1).

Telegraphic morbidity reports from State health officers for the week ended August 25, 1945, and comparison with corresponding week of 1944 and 5-year median—Con.

Division and State	Whooping cough			Week ended August 25, 1945							
	Week ended—		Median 1940-44	Dysentery			En- cep- hal- itis, in- fec- tious	Rocky Mt. spot- ted fever	Tula- remia	Ty- phus fever, en- dem- ic	Undu- lant fever
	Aug. 25, 1945	Aug. 26, 1944		Ame- bic	Bacil- lary	Un- spec- ified					
<b>NEW ENGLAND</b>											
Maine.....	34	9	13	0	0	0	0	0	0	0	0
New Hampshire.....	0	3	1	0	0	0	0	0	0	0	1
Vermont.....	20	24	14	0	0	0	0	0	0	0	1
Massachusetts.....	131	43	116	3	2	0	0	0	0	0	3
Rhode Island.....	9	1	13	0	0	0	1	0	0	0	0
Connecticut.....	28	70	44	0	43	0	0	0	0	0	3
<b>MIDDLE ATLANTIC</b>											
New York.....	417	166	247	1	8	0	3	1	0	2	1
New Jersey.....	196	66	116	1	0	0	0	0	0	1	1
Pennsylvania.....	173	59	199	1	0	0	0	0	0	0	3
<b>EAST NORTH CENTRAL</b>											
Ohio.....	158	130	192	0	0	0	0	0	0	0	2
Indiana.....	28	3	18	0	0	0	1	3	0	0	0
Illinois.....	99	88	156	8	1	0	0	0	0	0	2
Michigan <sup>2</sup> .....	170	107	215	3	2	0	0	0	0	0	5
Wisconsin.....	72	110	208	1	0	0	0	0	1	0	4
<b>WEST NORTH CENTRAL</b>											
Minnesota.....	27	39	44	0	0	0	0	0	0	0	3
Iowa.....	9	1	22	0	0	0	0	0	0	0	6
Missouri.....	29	26	20	0	0	1	0	0	0	0	1
North Dakota.....	2	12	18	1	0	0	1	0	0	0	5
South Dakota.....	1	7	6	0	0	0	0	0	0	0	1
Nebraska.....	0	3	4	0	0	0	0	0	0	0	1
Kansas.....	18	34	45	0	0	0	1	0	0	0	5
<b>SOUTH ATLANTIC</b>											
Delaware.....	3	3	1	0	0	0	0	2	0	0	0
Maryland <sup>2</sup> .....	63	61	61	0	0	3	0	2	0	0	0
District of Columbia.....	15	2	11	0	0	0	0	0	0	0	0
Virginia.....	51	39	57	0	0	431	0	4	0	0	0
West Virginia.....	4	13	13	0	0	0	0	2	0	0	0
North Carolina.....	75	117	107	1	0	0	0	3	0	5	0
South Carolina.....	95	31	31	2	41	0	0	0	0	12	0
Georgia.....	16	8	19	1	10	1	0	0	0	43	5
Florida.....	2	2	4	0	0	0	0	0	0	10	0
<b>EAST SOUTH CENTRAL</b>											
Kentucky.....	23	50	51	0	1	0	0	3	1	0	0
Tennessee.....	22	40	37	1	0	1	0	1	0	2	0
Alabama.....	19	15	15	5	0	0	1	2	1	35	5
Mississippi <sup>2</sup> .....				0	0	0	0	0	0	12	0
<b>WEST SOUTH CENTRAL</b>											
Arkansas.....	6	15	15	0	59	0	0	0	0	1	2
Louisiana.....	8	11	11	3	0	0	0	0	0	16	0
Oklahoma.....	7	3	4	1	16	0	0	0	0	0	1
Texas.....	235	165	136	10	467	26	0	0	0	82	6
<b>MOUNTAIN</b>											
Montana.....	7	25	21	0	3	1	0	0	0	0	0
Idaho.....	8	17	8	0	0	1	0	0	0	0	0
Wyoming.....	4	5	4	0	0	0	0	4	0	0	0
Colorado.....	44	11	29	0	0	0	0	0	0	0	0
New Mexico.....	11	0	14	0	6	1	0	0	0	0	0
Arizona.....	11	70	13	0	0	42	0	0	0	0	0
Utah <sup>2</sup> .....	35	23	26	0	0	0	0	1	0	0	1
Nevada.....	0	0	0	0	0	0	0	0	0	0	0
<b>PACIFIC</b>											
Washington.....	17	11	23	1	0	0	0	0	0	0	0
Oregon.....	5	8	17	0	0	0	0	0	0	0	0
California.....	144	60	165	2	6	0	15	0	0	1	3
<b>Total.....</b>	<b>2, 551</b>	<b>1, 806</b>	<b>2, 965</b>	<b>46</b>	<b>665</b>	<b>508</b>	<b>23</b>	<b>22</b>	<b>7</b>	<b>222</b>	<b>71</b>
Same week, 1944.....	1, 806			29	549	238	29	16	7	205	78
Average, 1942-44.....	2, 517			35	397	271	23	16	15	139	
34 weeks, 1945.....	86, 745			1, 229	16, 660	6, 643	302	372	526	2, 899	3, 181
1944.....	64, 958			1, 140	14, 543	5, 422	401	381	386	2, 934	2, 407
Average, 1942-44.....	108, 333		7 125, 149	1, 095	10, 345	4, 980	397	7 381	554	7 1, 972	

<sup>2</sup> Period ended earlier than Saturday.

<sup>3</sup> June cases, delayed report.

<sup>7</sup> 5-year median, 1940-44.

## WEEKLY REPORTS FROM CITIES

City reports for week ended August 18, 1945

This table lists the reports from 86 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Etiology, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
<b>NEW ENGLAND</b>												
<b>Maine:</b>												
Portland	0	0	0	0	0	0	2	2	3	0	0	6
<b>New Hampshire:</b>												
Concord	0	0	0	0	0	0	1	0	1	0	0	0
<b>Massachusetts:</b>												
Boston	1	0	0	0	16	1	7	20	11	0	2	32
Springfield	0	0	0	0	3	0	0	1	1	0	1	3
Worcester	0	0	0	0	14	0	6	0	3	0	0	1
<b>Rhode Island:</b>												
Providence	0	1	1	0	0	0	0	0	1	0	0	7
<b>Connecticut:</b>												
Bridgeport	0	0	0	0	0	0	0	1	0	0	0	1
Hartford	0	0	0	0	0	0	2	0	0	0	0	0
New Haven	0	0	0	0	0	0	0	0	0	0	0	4
<b>MIDDLE ATLANTIC</b>												
<b>New York:</b>												
Buffalo	1	0	0	0	1	0	3	7	3	0	0	3
New York	4	1	0	0	9	8	27	38	18	0	2	93
Rochester	0	0	0	0	0	0	2	16	1	0	0	14
Syracuse	0	0	0	0	0	0	0	0	1	0	0	25
<b>New Jersey:</b>												
Camden	0	0	0	0	0	0	0	0	5	0	0	1
Newark	0	0	1	0	1	0	1	4	1	0	9	10
Trenton	0	0	0	0	0	0	0	11	0	0	0	9
<b>Pennsylvania:</b>												
Philadelphia	0	0	1	0	14	1	8	18	14	0	5	94
Pittsburgh	0	2	0	0	0	1	4	2	2	0	1	12
Reading	0	0	0	0	0	0	0	1	1	0	1	2
<b>EAST NORTH CENTRAL</b>												
<b>Ohio:</b>												
Cincinnati	0	0	0	0	3	2	1	3	7	0	0	4
Cleveland	0	0	1	0	1	1	6	0	6	0	0	20
Columbus	0	0	0	0	1	0	0	2	5	0	0	1
<b>Indiana:</b>												
Fort Wayne	0	0	0	0	0	0	0	0	1	0	0	1
Indianapolis	0	0	0	0	3	1	1	1	2	0	0	7
South Bend	0	0	0	0	0	0	0	0	0	0	0	0
Terre Haute	0	0	0	0	0	0	0	0	0	0	0	1
<b>Illinois:</b>												
Chicago	1	0	0	0	33	6	14	11	11	0	1	72
Springfield	0	0	0	0	0	0	0	0	0	0	0	0
<b>Michigan:</b>												
Detroit	4	1	0	0	12	1	6	3	10	0	0	51
Flint	0	0	0	0	1	0	2	0	3	0	0	0
Grand Rapids	0	0	0	0	0	0	1	0	2	0	0	1
<b>Wisconsin:</b>												
Kenosha	0	0	0	0	0	0	0	0	1	0	0	3
Milwaukee	0	0	0	0	5	1	0	6	3	0	0	7
Racine	0	0	0	0	2	0	1	0	1	0	0	0
Superior	0	0	0	0	0	0	0	0	0	0	0	2
<b>WEST NORTH CENTRAL</b>												
<b>Minnesota:</b>												
Duluth	0	0	0	0	1	1	0	0	0	0	0	0
Minneapolis	0	0	0	0	0	0	1	8	2	0	0	0
St. Paul	0	0	0	0	1	2	1	0	0	0	0	2
<b>Missouri:</b>												
Kansas City	0	0	0	0	0	0	6	0	1	0	0	1
St. Joseph	0	0	0	0	0	0	0	0	0	0	0	0
St. Louis	0	0	0	0	1	1	4	7	1	0	1	18

## City reports for week ended August 18, 1945—Continued

	Diphtheria cases	Etiology, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
<b>WEST NORTH CENTRAL—continued</b>												
North Dakota:												
Fargo.....	0	0	0	0	0	0	0	0	0	0	0	0
Nebraska:												
Omaha.....	0	0	0	0	0	0	2	1	0	0	0	0
Kansas:												
Topoka.....	1	0	0	1	0	2	0	0	0	0	0	0
Wichita.....	1	0	0	0	0	2	0	1	0	0	0	0
<b>SOUTH ATLANTIC</b>												
Delaware:												
Wilmington.....	0	0	0	0	0	0	0	0	0	0	0	3
Maryland:												
Baltimore.....	6	0	0	1	2	3	2	8	0	0	0	34
Cumberland.....	0	0	0	0	0	0	0	1	0	0	0	0
Frederick.....	0	0	0	0	0	0	0	0	0	0	0	0
District of Columbia:												
Washington.....	0	0	0	0	1	4	12	3	0	0	0	8
Virginia:												
Lynchburg.....	0	0	0	0	0	1	0	0	0	0	0	0
Richmond.....	0	0	0	0	0	0	10	1	0	0	1	1
Roanoke.....	0	0	0	0	0	0	0	1	0	0	0	0
West Virginia:												
Charleston.....	0	0	0	0	0	0	1	1	0	1	0	0
Wheeling.....	0	0	0	0	0	1	0	0	0	0	0	0
North Carolina:												
Raleigh.....	0	0	0	0	0	0	0	1	0	0	0	4
Wilmington.....	1	0	0	0	1	0	0	3	0	0	0	6
Winston-Salem.....	0	0	0	0	0	0	0	2	0	0	0	13
South Carolina:												
Charleston.....	1	0	0	0	0	0	2	0	0	0	0	0
Georgia:												
Atlanta.....	0	0	0	0	0	0	1	0	0	1	1	1
Brunswick.....	0	0	0	1	0	0	0	1	0	0	0	0
Savannah.....	0	0	0	0	0	0	0	0	0	0	0	0
<b>EAST SOUTH CENTRAL</b>												
Tennessee:												
Memphis.....	0	0	0	0	1	3	3	0	0	0	0	7
Nashville.....	0	0	0	0	0	2	1	0	0	0	0	0
Alabama:												
Birmingham.....	0	0	0	0	0	1	7	1	0	0	0	1
Mobile.....	0	0	0	0	0	2	0	0	0	0	1	0
<b>WEST SOUTH CENTRAL</b>												
Arkansas:												
Little Rock.....	0	0	0	0	0	0	0	0	0	0	0	0
Louisiana:												
New Orleans.....	3	0	2	2	3	2	4	3	4	0	0	0
Shreveport.....	0	0	0	0	0	0	3	1	0	0	0	0
Texas:												
Dallas.....	2	0	0	0	0	2	5	3	0	0	0	3
Galveston.....	1	0	0	0	0	0	1	0	0	0	0	1
Houston.....	2	0	0	0	1	2	9	2	0	0	2	2
San Antonio.....	3	0	0	1	0	3	3	0	0	0	0	1
<b>MOUNTAIN</b>												
Montana:												
Billings.....	0	0	0	0	0	1	0	0	0	0	0	0
Great Falls.....	0	0	0	0	0	0	0	0	0	0	0	0
Helena.....	0	0	0	0	0	0	0	0	0	0	0	0
Missoula.....	0	0	0	0	0	1	0	0	0	0	0	0
Idaho:												
Boise.....	0	0	0	0	0	0	0	0	0	0	0	0
Colorado:												
Denver.....	0	0	2	0	0	3	7	2	0	0	0	15
Pueblo.....	3	0	0	0	0	1	0	1	0	0	0	1
Utah:												
Salt Lake City.....	0	0	0	5	0	3	4	0	0	0	0	7

## City reports for week ended August 18, 1945—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
<b>PACIFIC</b>												
Washington:												
Seattle.....	0	0	0	0	12	0	4	4	2	0	0	3
Spokane.....	0	0	0	0	0	0	2	0	1	0	0	0
Tacoma.....	1	0	0	0	10	1	0	0	0	0	0	1
California:												
Sacramento.....	0	0	0	0	0	0	0	0	1	0	0	8
San Francisco.....	1	0	1	0	13	2	4	2	12	0	2	2
Total.....	37	5	9	2	174	38	163	241	174	0	31	630
Corresponding week, 1944	29	18	8	8	184	268	268	132	132	0	34	552
Average, 1940-44.....	36	20	17	257	224	178	178	0	39	979		

<sup>1</sup> 3-year average 1942-44.

<sup>2</sup> 5-year median 1940-44.

*Dysentery, amebic.*—Cases: New York, 5; Chicago, 2; Detroit, 4; St. Louis, 2.

*Dysentery, bacillary.*—Cases: Boston, 1; Providence, 4; Buffalo, 1; New York, 3; Rochester, 1; Detroit, 2; St. Louis, 1; Atlanta, 4.

*Dysentery, unspecified.*—Cases: Washington, 1; Richmond, 1; San Antonio, 6.

*Typhus fever, endemic.*—Cases: Atlanta, 1; Savannah, 7; New Orleans, 3; Shreveport, 6; Houston, 3; San Antonio, 9.

*Rates (annual basis) per 100,000 population, by geographic groups, for the 86 cities in the preceding table (estimated population, 1943, 32,454,900)*

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Pollomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England.....	2.8	2.8	2.8	0.0	92	2.8	50.0	66.6	56	0.0	8.3	150
Middle Atlantic.....	2.3	1.4	0.9	0.0	12	4.6	20.8	44.9	21	0.0	8.3	122
East North Central.....	3.0	0.6	0.6	0.0	37	7.3	19.5	15.8	32	0.0	9.6	103
West North Central.....	4.0	0.0	0.0	0.0	18	8.0	35.8	31.8	10	0.0	2.0	42
South Atlantic.....	13.6	0.0	0.0	0.0	3	6.8	15.3	47.5	37	0.0	5.1	119
East South Central.....	0.0	0.0	0.0	0.0	0	5.9	47.2	64.9	6	0.0	5.9	47
West South Central.....	31.6	0.0	5.7	5.7	11	8.6	40.2	63.1	26	0.0	5.7	20
Mountain.....	23.8	0.0	15.9	0.0	40	0.0	71.5	87.4	24	0.0	0.0	183
Pacific.....	6.5	0.0	3.3	0.0	114	9.8	32.6	19.6	52	0.0	6.5	46
Total.....	6.0	0.8	1.4	0.3	28	6.1	26.3	38.8	28	0.0	5.0	101

**PLAGUE INFECTION IN KERN COUNTY, CALIF., MORTON COUNTY, KANS., AND LARAMIE COUNTY, WYO.**

Under date of August 9, plague infection was reported proved, on August 7, in a pool of 185 fleas from 4 ground squirrels, *C. beecheyi*, shot on the east side of Castair Lake, 1½ miles east and ½ mile south of Lebec, Kern County, Calif. Also, in an additional pool of 200 fleas from the same 35 ground squirrels, *C. beecheyi*, previously reported shot 1½ miles east and ½ mile north of Lebec.

Plague infection has been reported to have been proved on August 17 in a pool of 43 fleas from 83 mice, *Peromyscus* sp., and another pool of 52 fleas from 6 rats, *Neotoma* sp., collected, respectively, on July 22 and 24 and July 21 and 24, in Morton County, Kans., 10 miles north of Elkhart on State Highway No. 27, and 5 miles west along river bottom. This location is approximately of the same longitude as that of the locality in Cheyenne County, where plague infection was found on June 23 (Pub. Health Rep., July 20, 1945, p. 849). That was the first instance of plague infection reported in Kansas and the locality is the farthest east in which the infection has been found in wild rodents or their ectoparasites in the United States.

Under date of August 14, plague infection was reported proved, on August 14, in a pool of 33 fleas from 108 ground squirrels, *C. lateralis*, collected July 28 at a location 34 miles west of Cheyenne, Laramie County, Wyo., on U. S. Highway No. 30—Medicine Bow National Forest.

#### TERRITORIES AND POSSESSIONS

##### Hawaii Territory

*Plague (rodent).*—Plague infection in 3 rats found in District 9A, Paauhau area, Honokaa, Hamakua District, Island of Hawaii, T. H., has been reported as follows: 1 rat found on June 23, 1945, was proved positive on June 28, 1945; 2 rats found on June 26, 1945, were proved positive on July 2, 1945.

\* \* \*

#### DEATHS DURING WEEK ENDED AUGUST 18, 1945

[From the Weekly Mortality Index, issued by the Bureau of the Census, Department of Commerce]

	Week ended Aug. 18, 1945	Correspond- ing week, 1944
<b>Data for 93 large cities of the United States:</b>		
Total deaths.....	7,642	8,681
Average for 3 prior years.....	8,006	-----
Total deaths, first 33 weeks of year.....	299,879	304,927
Deaths under 1 year of age.....	534	663
Average for 3 prior years.....	639	-----
Deaths under 1 year of age, first 33 weeks of year.....	19,956	20,472
<b>Data from industrial insurance companies:</b>		
Policies in force.....	67,361,444	66,699,037
Number of death claims.....	6,181	11,555
Death claims per 1,000 policies in force, annual rate.....	4.8	9.1
Death claims per 1,000 policies, first 33 weeks of year, annual rate.....	10.4	10.2

## FOREIGN REPORTS

### CANADA

*Provinces—Communicable diseases—Week ended August 4, 1945.*—During the week ended August 4, 1945, cases of certain communicable diseases were reported by the Dominion Bureau of Statistics of Canada as follows:

Disease	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox.....		1		19	50	9	3	67	27	176
Diphtheria.....		2	4	21	1	5	1			34
Dysentery, bacillary.....				11					2	13
Encephalitis, infectious.....						1	1			2
German measles.....				1	7		1	1	4	14
Influenza.....	1				5				2	8
Measles.....				14	54	5	8	16	27	124
Mumps.....	1			2	28	9	9	25	7	81
Pollomyelitis.....				1	6					8
Scarlet fever.....		3	10	45	25	10	3	5	4	105
Tuberculosis (all forms).....		8	10	95	25	22			46	206
Typhoid and paratyphoid fever.....				15	1	2	1			19
Undulant fever.....				2	1					3
Veneral diseases:										
Gonorrhoea.....		29	18	65	162	52	35	33	75	469
Syphilis.....		13	2	144	73	14	6	19	36	307
Whooping cough.....		2		175	12	3	2	10	5	209

### FINLAND

*Helsinki—Typhoid fever.*—A report dated August 20, 1945, stated that an outbreak of typhoid fever had occurred in Helsinki, Finland. According to press reports there were 650 cases reported as of August 18, and 735 cases as of August 19, 1945. No fatal cases have been reported. It is stated that milk is the principal source of infection.

*Notifiable diseases—June 1945.*—During the month of June 1945, cases of certain notifiable diseases were reported in Finland as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis.....	22	Mumps.....	393
Chickenpox.....	511	Paratyphoid fever.....	276
Conjunctivitis.....	14	Pneumonia (all forms).....	1,687
Diphtheria.....	1,057	Poliomyelitis.....	35
Dysentery, unspecified.....	26	Puerperal fever.....	29
Gastroenteritis.....	2,748	Rheumatic fever.....	257
Gonorrhoea.....	1,700	Scabies.....	2,321
Hepatitis, epidemic.....	510	Scarlet fever.....	271
Influenza.....	349	Syphilis.....	338
Laryngitis.....	25	Typhoid fever.....	58
Malaria.....	243	Vincent's angina.....	36
Measles.....	80	Whooping cough.....	2,632

## REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

NOTE.—Except in cases of unusual incidence, only those places are included which had not previously reported any of the above-mentioned diseases, except yellow fever, during the current year. All reports of yellow fever are published currently.

A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

### Plague

*British East Africa—Kenya.*—For the week ended July 28, 1945, 12 cases of plague were reported in Kenya, British East Africa.

*Egypt.*—For the week ended July 21, 1945, 10 cases of plague with 1 death were reported in all of Egypt. For the week ended August 4, 1945, 2 fatal cases of plague were reported in Port Said, Egypt.

*Morocco (French).*—For the period August 1–10, 1945, 47 cases of plague were reported in French Morocco, including 46 cases in Chaouia region and 1 in Marrakesh region.

*Palestine—Tel-Aviv.*—For the week ended August 18, 1945, 1 case of plague was reported in Tel-Aviv, Palestine.

### Smallpox

*British East Africa—Tanganyika.*—For the week ended July 21, 1945, 128 cases of smallpox with 8 deaths were reported in Tanganyika, British East Africa.

*Rhodesia, Northern.*—For the week ended July 21, 1945, 68 cases of smallpox with 2 deaths were reported in Northern Rhodesia.

*Sudan (French).*—For the period July 21–31, 1945, 109 cases of smallpox were reported in French Sudan.

### Typhus Fever

*Egypt.*—For the week ended July 21, 1945, 146 cases of typhus fever with 14 deaths were reported in all of Egypt.

*Iran.*—For the period March 31 to May 11, 1945, 222 cases of typhus fever were reported in Iran, including 30 cases reported in Tehran, Iran.

*Morocco (French).*—For the period August 1–10, 1945, 309 cases of typhus fever were reported in French Morocco, including 3 cases reported in Casablanca and 2 cases in Rabat.

*Sweden.*—For the period June 1–15, 1945, 24 cases of typhus fever were reported in Sweden, including 6 cases reported in Malmo, Sweden.