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DENTAL SERVICES RECEIVED BY CHILDREN IN A NEW YORK CLINIC¹

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There are in the United States a large number of public and private dental clinics providing care of varied range. While much useful information is contained in annual reports and other sources about the kinds and the total volume of services furnished, there is little information to be found in detail about the diligence with which patients, children particularly, return for care, the variation among patients in needed services, the increment in dental needs over periods of time, and the dental manpower required to provide service.

This is the second clinic reported on in a series of studies dealing with some of these problems. Two reports on the clinics of the Philadelphia Mouth Hygiene Association have already appeared (1, 2); the present report is based on study of the Murray Hill Health Service in New York City. Although both adults and children are treated at this clinic, the data are confined to children's records.

THE MURRAY HILL HEALTH SERVICE

The Murray Hill Health Service, a medical and dental clinic maintained by the Community Service Society of New York, is "a family and health agency serving people without regard to race, creed, color, or national origin"² which provides many social services in addition to medical and dental care. The Murray Hill Health Service is the largest of four clinics maintained by the society in Manhattan and the Bronx.

The dental department of this clinic has 3 of 10 chairs reserved exclusively for children. The work is done by two full-time and a staff of part-time salaried dentists. Prophylaxes are performed by hygienists and X-rays are taken by a trained technician.

The clients of the Murray Hill Health Service are the so-called "medically indigent"; they are people who can pay something toward

¹ From the Division of Public Health Methods.

² From its letterhead.

the cost of their care but cannot afford complete private medical or dental services. The measure of eligibility is the family income. The means test varies with the cost of living and its application is flexible.

COMPOSITION OF THE GROUP OF CHILDREN STUDIED

For the purposes of this study, it was decided at first to tabulate the records of all children 16 years of age and younger who came to the clinic originally in 1942 or 1943, as had been done in the study of the Philadelphia Mouth Hygiene Association. It was discovered that new patients concentrated at the upper levels of the age interval selected for observation. In this group 51 percent were 13 years or older, whereas only 36 percent of all children in the United States between the ages of 5 and 16 are within this age range (1940 Census). This high proportion of older children seems to stem from the policy of many senior and junior high school principals which requires the correction of dental defects before a diploma is received or before a passing grade is given in hygiene. To produce findings comparable with the preceding study, the records of all children 10 years of age and under who first visited this clinic in the next half-year—from January through June 1944—were added. The age and sex distribution of the whole group of 1,519 children is shown in table 1.

TABLE 1.—*Number of children, by sex and age groups, who first came to the dental clinic of the Murray Hill Health Service in 1942-43*¹

Sex	Average age (years)	Age in years													
		All ages	5 or less	6	7	8	9	10	11	12	13	14	15	16	
All children.....	11.2	1,519	97	81	92	128	122	120	77	122	147	183	195	165	
Boys.....	11.1	709	43	29	51	70	63	58	34	65	69	78	77	72	
Girls.....	11.4	810	54	52	41	58	59	62	43	57	78	105	118	83	

¹ Includes 183 children 10 years of age and under who first came to the clinic in January-June, 1944.

There are 104 children included in this table for whom time did not permit complete tabulation of records, and another 64 whose records could not be tabulated for various other reasons. The data to be presented will be based largely on the remaining 1,351 children whose average age was 11.3 years. Color of the patients is not recorded by the clinic, but it was evident from various indicia, such as name, address, and the fact that the Community Service Society sponsors a clinic in the Harlem section, where the Negro population is concentrated, that all but a very small fraction were white children.

The question arises as to what more general population this sample represents. Although some element of compulsory attendance results

from the requirement of a "healthy" mouth for school graduation, attendance at the clinic is essentially a voluntary matter. Even among the older children, who may be compelled to obtain dental treatment, inability to pay customary fees may operate to bring the worst cases to this low-cost clinic; many of the milder cases may be able to afford the private practitioner. Hence, the children are not necessarily a representative group from the viewpoint of dental need or treatment required. The sample is probably representative, however, of the kinds of children that come to such clinics. And there is nothing to indicate that the clinic itself, in the patients it draws, is not typical of clinics offering general dental services to children. The comparison with the Philadelphia Mouth Hygiene Association, to be presented at the end of this paper, will show the experiences of the two to be quite similar.

STATUS OF CASE HISTORIES

The experience of one urban clinic in dealing with its patients under 17 years of age is being described here. Important to that experience is the degree of constancy displayed by the children in coming for care. This applies both to the completion of a series of dental treatments, in which sense the term "completion" will be employed, and the regularity of return for periodic examination and further treatment.

Table 2 shows the treatment history of the 1,519 children whose records were reviewed. The data are arranged in order of completeness of treatment, starting with the children whose dental care could be considered current; that is, they were, as of March 1, 1946, coming to the clinic or had completed their most recent recall within 6 months of this date. Two main divisions have been made on the basis of whether or not the child completed the initial series of treatments. As the table shows, 61 percent of the original group received all the necessary initial treatment and 39 percent did not.

When a child has had all dental needs taken care of and requires no further treatment—for the time being—he is given an appointment card for a date approximately 6 months hence. When the child returns he receives a new examination, and a new series of treatments is begun. This series of treatments has been given the name "recall," the term employed by the clinics of the Philadelphia Mouth Hygiene Association. The "first recall" is the series of treatments succeeding the initial series; and so on.

Twenty-seven percent of the 1,519 children in the group never returned after completing the initial series. Fourteen percent either did not complete the first recall or did not come back after completing it; another 7 percent dropped out in later stages. Of the entire group,

12 percent had completed each series they started and were up to date in their treatment at this clinic, as defined above.

TABLE 2.—*Treatment history of 1,519 children who first came to the dental clinic of the Murray Hill Health Service in 1942-43*¹

Treatment history	Number of children			Percentage of children		
	All	Boys	Girls	All	Boys	Girls
Initial treatment complete:						
Treatment up to date.....	189	72	117	12.4	10.2	14.4
Response after second recall but treatment not up to date.....	26	14	12	1.7	2.0	1.5
No response after completed second recall.....	71	33	38	4.7	4.6	4.7
Second recall incomplete.....	12	3	9	.8	.4	1.1
No response after completed first recall.....	160	70	90	10.5	9.9	11.1
First recall incomplete.....	57	25	32	3.8	3.5	4.0
No response to first recall.....	409	207	202	26.9	29.2	24.9
Total.....	924	424	500	60.8	59.8	61.7
Initial treatment incomplete:						
No further response.....	412	197	215	27.1	27.8	26.6
Child returned at later date.....	183	88	95	12.1	12.4	11.7
Total.....	595	285	310	39.2	40.2	38.3
All histories.....	1,519	709	810	100.0	100.0	100.0

¹ Includes 183 children 10 years of age and under who first came to the clinic in January-June, 1944.

It is to be noted from table 2 that almost a third of the children who did not complete the initial series, 183 out of 595, returned for treatment at some later date. The return was classified as a new series of treatments, rather than a continuation of the initial series, if X-rays were taken and another examination made. Of these 183 children, 52 were undergoing treatment at the time their records were tabulated for this study.

Differences between the sexes in seeking and continuing care appear to be small, the girls demonstrating a slightly greater tendency to persist in obtaining treatment. Forty percent of the boys and 38 percent of the girls did not complete the initial series; 29 percent of the boys did not respond to the first recall as against 25 percent of the girls.

Age differences with respect to perserverence in continuing treatment are quite significant. This is brought out in table 3, where the children have been divided into four age groups and the data are shown for three important stages of treatment history. Among these children the tendency to keep up in treatment diminished as they grew older. In the group 7 years of age and younger at the first visit, 19 percent had up-to-date records, while the percentage was only 6 in the group 14 to 16 years of age. At the same time, the percentage of children who failed to complete the initial series increased from 31 in the youngest group shown in the table to 44 in the oldest. There was a slighter increase, from 24 to 29, in the percentage who failed to keep the appointment for first recall.

TABLE 3.—*Status of case record, by age group. Murray Hill Health Service*

Record history	Percent of children in age group			
	7 years and under	8-10 years	11-13 years	14-16 years
Treatment up to date ¹	18.8	14.1	10.7	6.2
Initial series complete but no response to first recall	24.4	25.2	27.5	29.1
Initial series incomplete	31.3	37.7	39.0	44.3
Number of children in group (=100 percent)	271	369	346	533

¹ Children who did not complete each successive series of treatments are excluded.

² Based on children who first came to the clinic in 1942 or 1943.

CHILDREN COMPLETING THE INITIAL SERIES OF VISITS

There were 860 children, in the group whose records were tabulated, who completed the initial series of treatments. The average number of services received and number of visits in which those services were provided are shown in table 4.

It might be well at this point to describe the term "visit" as it applies to this clinic. Since X-rays are a prerequisite to examination and treatment, the child's first visit to the clinic is devoted to the taking of films, including four bite-wings. The patient generally returns in a few days for a prophylaxis by the hygienist and an examination by one of the two full-time men who charts the necessary treatment at this time. The visits for treatment which follow are scheduled approximately a week apart. Since payment is on the basis of units of service, the income to the clinic from its patients is not affected by the amount of work accomplished at a visit and hence several operative procedures may be performed at a single sitting.

Services.—X-rays, prophylaxis, and examination are routine, although in a very few cases the first two were omitted. In addition to the examination, it is the practice of the clinic's technical supervisor to post-examine enough cases to insure the quality of the work being done, and he and the full-time dentists act as consultants in complex situations. An X-ray consultant also reviews the charts to note if diagnoses were correct and if work indicated was done. Of the 860 children, 100 were re-examined by the supervisor, and the treatment of 56 called for consultation. Eight children were included in both categories.

The average number of teeth filled, deciduous and permanent combined, was 6.8. Only 3 percent of the group required no fillings at all. It must be remembered that the number of cavities was determined by X-rays as well as by mirror and explorer examination. Forty-three percent of the children had either deciduous or permanent teeth extracted, and the average loss was 0.9 of a tooth per child—0.6 deciduous and 0.3 permanent. These extractions were all done under local anesthesia.

TABLE 4.—Services and visits on initial series of treatments for 860 children who completed this series. Murray Hill Health Service

Service	Children receiving specified service		Number of teeth		Number of visits		
	Number	Percent-age	Per child in group	Per child treated	Per child in group	Per child treated	Per tooth treated
Examination:							
Prior to treatment.....	860	100.0	-----	-----	1.0	1.0	-----
Consultation.....	56	6.5	-----	-----	.1	1.0	-----
After treatment.....	100	11.6	-----	-----	.1	1.0	-----
X-ray.....	855	99.4	-----	-----	1.0	1.0	-----
Prophylaxis.....	831	96.6	-----	-----	1.1	1.1	-----
Fillings:							
Deciduous teeth.....	308	35.8	1.5	4.3	1.5	4.2	0.98
Permanent teeth.....	726	84.4	5.3	6.3	5.9	7.0	1.11
Extractions:							
Deciduous teeth.....	231	26.9	.6	2.2	.5	1.8	.81
Permanent teeth.....	171	19.9	.3	1.7	.3	1.7	1.01
Polishing.....	706	82.1	-----	-----	.8	1.9	-----
Total services and visits...	860	100.0	7.7	-----	* 10.8	10.8	-----

¹ Per child who had one or more fillings.

² This is an unduplicated count of visits and is not the sum of the column.

The data shown in table 4 refer only to the more or less routine services. There were a number of other services, such as root canal therapy and prosthetic treatment, which will be presented separately (p. 1368). Since the number of children receiving such services were comparatively few, the number of visits they entailed would increase the average number of visits per child in the group by an insignificant amount.

Visits.—Table 4 shows the number of visits per child in the group, per child treated, and per tooth treated. In tabulating the visits for each kind of treatment, a visit was counted more than once if more than one kind of service was received on that date; that is, if there were more than one kind of service, a filling and an extraction for example, the visit was counted once for the filling and once for the extraction. But since the tendency was to do the same kind of work in any one visit, there is not much difference between the actual count of visits and the sum of visits by type of service. The unduplicated count of visits, 10.8, shown in the last line of the table is only 1.5 less than the sum of the column headed "Number of visits per child in group." A good part of this difference can be accounted for by X-ray, consultation, and post-examination which very often occurred with other services on the same visit.

Discussion of this portion of table 4 is deferred to a later point where data on visits per service are brought together for the initial series and the first and second recalls (p. 1367).

CHILDREN FAILING TO COMPLETE THE INITIAL SERIES

Dental services were tabulated for 491 children who failed to complete the initial series (table 5). The children on the average were

0.7 of a year older than those who completed the initial series, and, as a group, required appreciably more dental care. The comparison between the two groups is summarized in table 6 and shown graphically in figure 1.

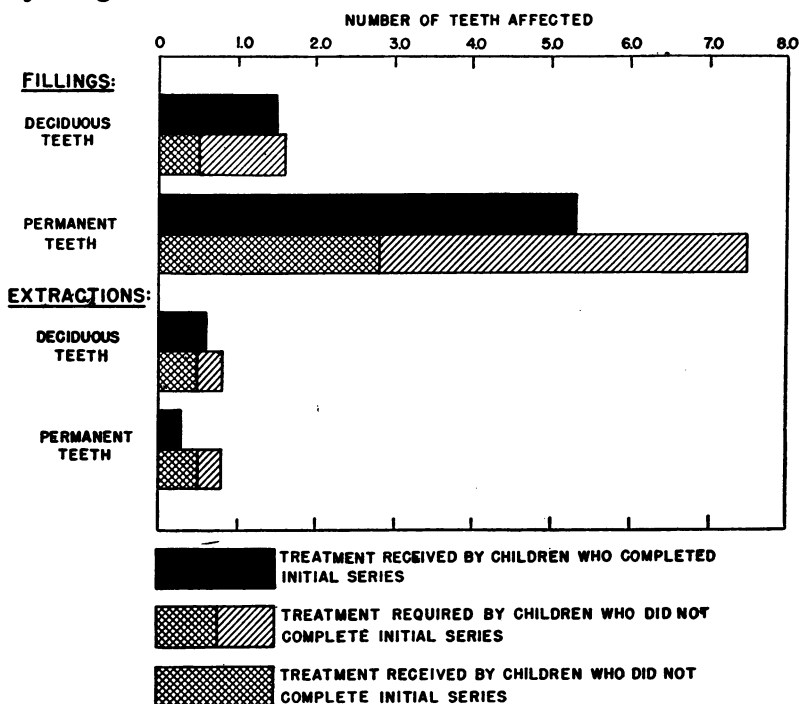


FIGURE 1.—Care required on initial series: Comparison of children who completed this series with those who did not. Murray Hill Health Service.

TABLE 5.—Services and visits on initial series of treatments for 491 children who failed to complete this series. Murray Hill Health Service

Service	Number of children	Percent of children	Number of teeth		Number of visits		
			Per child in group	Per child needing specified service	Per child in group	Per child needing specified service	Per tooth treated
Prophylaxis.....	437	89.0	-----	-----	1.0	1.1	-----
Fillings:							
Deciduous indicated.....	172	35.0	1.6	4.5	-----	-----	-----
Deciduous filled.....	104	21.2	.5	2.5	.6	2.7	1.10
Permanent indicated.....	451	91.9	7.5	8.1	-----	-----	-----
Permanent filled.....	343	69.9	2.8	4.0	3.2	4.5	1.12
Extractions:							
Deciduous indicated.....	159	32.4	.8	2.6	-----	-----	-----
Deciduous extracted.....	116	23.6	.5	2.2	.4	1.6	.73
Permanent indicated.....	169	34.4	.8	2.3	-----	-----	-----
Permanent extracted.....	119	24.2	.5	1.9	.4	1.6	.88
Total services and visits..	491	100.0	¹ 10.7	-----	² 7.3	7.3	-----

¹ Number of teeth indicated for filling or extraction.

² This is an unduplicated count of visits and is not the sum of the column. It includes visits for examination, X-ray, and polishing.

Table 5 shows both the number of services indicated and those actually received, from which can be calculated the proportion of the group's need that was met. About 4 in every 10 teeth requiring filling or extraction had the needed service completed. Over half the needed extractions were taken care of, but only a third of the teeth needing filling were completely treated (fig. 1). The reason lies to large extent in the clinic's practice of doing the most urgent work first. It was apparent from some records that it was an emergency extraction that brought the child to the clinic originally.

TABLE 6.—*Treatment indicated on initial series: Comparison of children who completed this series with those who did not. Murray Hill Health Service*

Treatment	Number of teeth per child	
	Initial series—	
	Completed	Not completed
Fillings:		
Deciduous teeth.....	1.5	1.6
Permanent teeth.....	5.3	7.5
Extractions:		
Deciduous teeth.....	.6	.8
Permanent teeth.....	.3	.8
Total.....	7.7	10.7

The number of visits per service, as shown in the last column of table 5, is similar to that for the group completing the initial series, with the exception of extractions of permanent teeth. Again attention is called to page 1367 where visits per service are discussed.

SERVICES RECEIVED ON FIRST RECALL

Interval between initial series and first recall.—It is important to remember that the group in this section presumably had all its dental needs taken care of at completion of the initial series; those who did not complete that series have been omitted. The services required on the first recall represent, therefore, the increment in need that occurred in a measurable, rather short, interval of time. As stated previously, an appointment for follow-up about 6 months later is made when a patient completes a series of treatments. However, the actual interval ranged from 2 months to 3 years for the 448 children who returned for the first recall or follow-up and whose records were tabulated.

Eight percent came back within 4 months, because of some emergency or because previous treatment was to be checked. Cases returning in so brief an interval were classified as starting a new series if the preceding one was marked completed and a new examination and X-rays made. Twenty-eight percent came back in the

5-7 months' interval that would indicate their appointments were kept; another 38 percent turned up in the succeeding 5 months. Thus, 76 percent came back within a year. The mean interval for the group was 10.9 months, the median 9.6 months.

Services.—The services indicated for these children and the services received are shown in table 7. The differences between services indicated and received, which are relatively small, result from the fact that 53 children stopped attending the clinic at some time before completing this follow-up. The data are limited to the routine services—prophylaxes, fillings, and extractions.

TABLE 7.—*Services and visits on first recall for 448 children.¹ Murray Hill Health Service*

Service	Number of children	Percentage of children	Number of teeth		Number of visits		
			Per child in group	Per child needing specified service	Per child in group	Per child needing specified service	Per tooth treated
Prophylaxis.....	387	87.2	-----	-----	0.9	1.1	-----
Fillings:							
Deciduous indicated.....	134	29.9	0.9	2.9	-----	-----	-----
Deciduous filled.....	129	29.1	.8	2.8	.9	3.1	1.08
Permanent indicated.....	330	84.8	3.5	4.2	-----	-----	-----
Permanent filled.....	367	82.7	3.1	3.7	3.1	3.8	1.01
Extractions:							
Deciduous indicated.....	64	14.3	.3	1.8	-----	-----	-----
Deciduous extracted.....	61	13.7	.3	1.9	.2	1.4	.77
Permanent indicated.....	14	3.1	.04	1.1	-----	-----	-----
Permanent extracted.....	13	2.9	.03	1.2	.04	1.2	1.07
Total services and visits.....	1 448	100.0	14.7	-----	16.8	6.8	-----

¹ Rates showing services received are based on 444 children.

² Number of teeth indicated for filling or extraction.

³ This is an unduplicated count of visits and is not the sum of the column. It includes visits for examination, X-ray, and polishing.

For the group as a whole, 4.4 teeth per child needed filling and 0.3 of a tooth was indicated for extraction. Only 38 children in the group had no cavities requiring attention. In those children who had one or more deciduous teeth to be filled, the average was 2.9 teeth; the corresponding figure for the permanent teeth was 4.2. Few children had to have more than one permanent tooth extracted.

When the children are divided into groups according to the interval between the initial series and the first recall, the permanent teeth that required filling per child are as follows:

Months between series of treatments	Average interval (months)	Permanent teeth requiring fillings
6 or less	4.9	2.8
7-12	9.6	3.5
13-18	15.5	4.2
19-24	21.1	5.1

The increment is about 0.7 of a tooth per 6 month interval, but it will be observed that the initial rate is high, 2.8 teeth per child in the group returning in 6 months or less. These rates apply not only to new teeth attacked by caries but cover also repairs and restorations of previous fillings and the care of additional cavities in teeth that already had fillings.

It is of interest to consider whether the children who returned for first recall differed from those who completed the initial series but did not return. Comparison of the needs of both groups on the initial examination reveals little difference. Those who returned had an average of 7.6 teeth in need of filling or extraction, while those who did not had 8.0 such teeth. It is likely, then, that the increments shown in the table are typical of the patients of the clinic in this age group.

Needed services in relation to age.—The data take on additional meaning when examined in relation to the age of the children. They are shown in table 8 for five age groupings. As is to be expected, the need for services in the deciduous teeth decreases with advancing age, the average number of permanent teeth in need of fillings increases with age. With respect to the latter, a peak was reached in the 13–15 year group at 5.1 teeth per child, with a drop to 3.7 teeth in the group 16 years of age and older.

TABLE 8.—*Fillings and extractions indicated on first recall, by age group, Murray Hill Health Service*

Age (in years)	Number of children	Per child in age group			
		Deciduous fillings (teeth)	Permanent fillings (teeth)	Deciduous extractions	Permanent extractions
6 or less.....	32	3.4	1.3	0.9	-----
7-9.....	106	2.1	2.3	.5	-----
10-12.....	101	.6	3.4	.3	.1
13-15.....	128	(¹)	5.1	-----	.1
16-17.....	81	-----	3.7	(¹)	(¹)
All children.....	448	0.9	3.5	0.3	(¹)

¹ Less than 0.05.

SERVICES RECEIVED ON SECOND RECALL

Data were tabulated for 214 children on second recall. These presumably had all dental needs taken care of on the first recall; hence, the figures shown in table 9 represent the increment in need that arose since the first recall.

TABLE 9.—*Services and visits on second recall for 214 children.¹ Murray Hill Health Service*

Service	Number of children	Percent- age of children	Number of teeth		Number of visits		
			Per child in group	Per child needing specified service	Per child in group	Per child needing specified service	Per tooth treated
Prophylaxis.....	191	90.5	-----	-----	0.9	1.0	-----
Fillings.....							
Deciduous indicated.....	60	28.0	0.7	2.4	-----	-----	-----
Deciduous filled.....	57	27.0	.6	2.3	.7	2.7	1.15
Permanent indicated.....	166	77.6	3.4	4.3	-----	-----	-----
Permanent filled.....	163	77.3	3.2	4.1	3.4	4.3	1.06
Extractions.....							
Deciduous indicated.....	28	13.1	.2	1.7	-----	-----	-----
Deciduous extracted.....	28	13.3	.2	1.6	.2	1.3	.82
Permanent indicated.....	7	3.3	.03	1.0	-----	-----	-----
Permanent extracted.....	6	2.8	.03	1.0	.03	1.0	1.00
Total services and visits..	¹ 214	100.0	² 4.3	-----	³ 6.9	6.9	-----

¹ Rates showing services received are based on 211 children.² Number of teeth indicated for filling or extraction.³ This is an unduplicated count of visits and is not the sum of the column. It includes visits for examination, X-ray, and polishing.

The average interval between the two recalls was 8.8 months. Thirty-two percent of the children returned in 6 months or less; 83 percent returned within a year. By the end of 18 months the percentage returned was 97.

The most impressive point, perhaps, about table 9 is that it differs so little from table 7, which showed comparable data for the first recall. The same dental needs developed after the second recall when all required care had presumably been provided. The pertinent figures are brought together from tables 7 and 9 for comparison:

Indicated treatment per child in group		First recall	Second recall
Fillings:			
Deciduous teeth.....	-----	0.9	0.7
Permanent.....	-----	3.5	3.4
Extractions:			
Deciduous teeth.....	-----	.3	.2
Permanent teeth.....	-----	.04	.03

The services required on second recall are consistently lower but the differences are small and may be partly accounted for by the fact that there was a smaller interval between first and second recalls (8.8 months) than between initial series and first recall (10.9 months). The inference appears to be that this group is manifesting a fairly uniform accretion of dental need over regular intervals.

Fillings and extractions indicated on second recall are shown by age group in table 10. Again, the findings are similar to those shown for the first recall (table 8).

TABLE 10.—*Fillings and extractions indicated on second recall, by age group. Murray Hill Health Service*

Age (in years)	Number of children	Per child in age group			
		Deciduous fillings (teeth)	Permanent fillings (teeth)	Deciduous extractions	Permanent extractions
6 or less.....	18	2.6	0.8	0.4
7-9.....	50	1.4	1.9	.5	(1)
10-12.....	53	.5	3.3	.2	(1)
13-15.....	61	(1)	5.0	(1)	0.1
16-17.....	32	4.1
All children.....	214	0.7	3.0	0.2	(1)

(1) Less than 0.05.

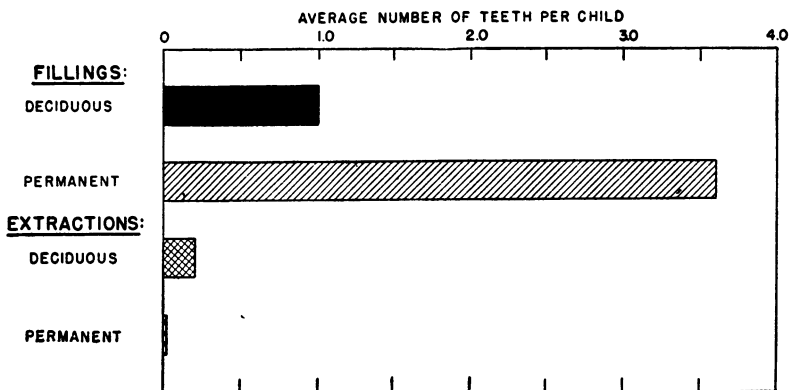


FIGURE 2.—Average annual increment in needed fillings and extractions. Murray Hill Health Service.

ANNUAL INCREMENT IN REQUIRED TREATMENT

The records used to obtain an approximation of the annual increment in required treatment were those of children for whom the interval between series of treatments was 10-15 months, inclusive. Two groups are compared below as to teeth affected per child: (a) 142 children who did not come back for their first recall until 10-15 months had elapsed, and (b) 78 children for whom the total interval between the initial series and the second recall was 10-15 months. Figure 2 is based on group (a).

		Group for which there was interval of 10-15 months, inclusive, between initial series and	
Service		First recall	Second recall
Fillings:			
Deciduous teeth.....		1.0	1.4
Permanent teeth.....		3.6	5.3
Extractions:			
Deciduous teeth.....		.2	.4
Permanent teeth.....		.02	.02

The rates in the right-hand column are a total of the services needed on first recall and on second recall combined. It will be observed that they are appreciably higher than the findings for those children who permitted a year to elapse before returning for even the first recall. Explanation may lie in two factors: the likelihood that some of the teeth filled (or extracted) on second recall had also been filled during the first recall series, and the possibility that the additional examination afforded by the second recall provided an opportunity to discover cavities previously missed. There were no differences in age between the two groups to account for the variation.

Figure 3 shows the data by age for the 142 children whose treatment on first recall occurred 10–15 months after the initial series. They are similar to the rates in table 8, which have been discussed.

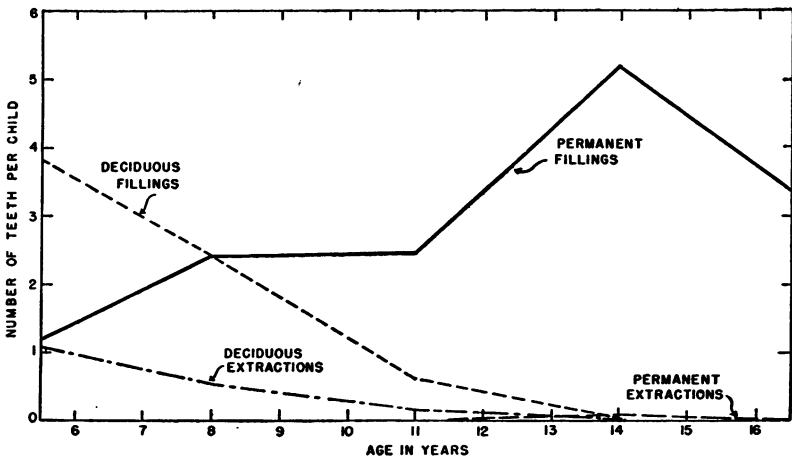


FIGURE 3.—Approximate annual incidence of needed fillings and extractions, by age. Murray Hill Health Service.

VISITS PER SERVICE

Data from tables 4, 5, 7, and 9, on visits per service, have been collected in table 11 and a weighted average computed based on the number of teeth involved, except for prophylactic treatments (figure 4). The striking thing about the table is the uniformity of these averages for each type of service; their variation with recall number is small.

In general, the routine kinds of treatments shown in the table require one visit per operation, but the variations from unity are of some importance in the light of their direction and the kinds of services to which they relate. In the instance of prophylaxis, 10 per cent of the children required more than one visit. Fillings in decidu-

ous teeth averaged very close to one visit per tooth, but it took 1.09 visits, on the average, for the complete filling of a permanent tooth.

TABLE 11.—*Visits per type of service for each series of treatments and average for all series. Murray Hill Health Service*

Type of service	Children who completed initial series			Initial series in-complete	Weighted average
	Initial series	First recall	Second recall		
Prophylaxis.....	1.13	1.05	1.02	1.11	1.10
Filling (tooth completed):					
Deciduous teeth.....	.98	1.08	1.15	1.10	1.02
Permanent teeth.....	1.11	1.01	1.06	1.12	1.09
Extractions:					
Deciduous teeth.....	.81	.77	.82	.73	.78
Permanent teeth.....	1.01	1.07	1.00	.88	.96

The ratio of 0.78 visits per extracted deciduous tooth results from the fact that the extraction of two or more deciduous teeth at one visit was quite common. About 40 of every 100 extractions of deciduous teeth were accomplished in this way. On the other hand, it rarely happened that more than one permanent tooth was extracted at one visit. There were a small number of post-operative treatments which have been included in the visits for extraction.

Number of visits per service is an easily obtained constant which is useful in making estimates of needed dental facilities for children. It offers an advantage over employing the figure, number of teeth to be treated, for estimating such items as dental manpower requirements in that allowance can more adequately be made for time between children, interruptions, and the like, and for the administration of the clinic service.

The findings here on visits per service are similar to those obtained in the clinics of the Philadelphia Mouth Hygiene Association (2). Just as in New York, such services as deciduous extractions, which are generally brief operations, were often done two at a time, while the complete filling of a permanent tooth was frequently spread over two visits. The reason seemed to be that the operators tried to make the visits of equivalent worth because charges were made at so much per visit. In the New York clinic, where charges are made according to service, the reasons appear to be the amount of treatment the child can take in one visit, the number waiting to be treated, and perhaps, a design to keep down the total cost of the visit.

SPECIAL SERVICES

Only a small number of children received treatments other than those which have above been called routine. Root canal therapy was performed for 35 children; another 11, heretofore not counted, received only this service. Prosthetic appliances were provided for

24 children, and oral surgery, such as the removal of flaps or an epulis, was done for 7.

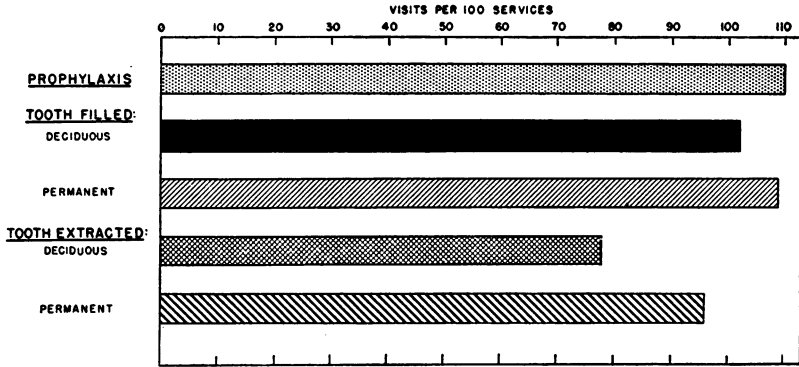


FIGURE 4.—Visits per 100 specified dental services. Murray Hill Health Service.

COMPARISON OF FINDINGS FOR TWO CLINICS

As stated at the outset, the Murray Hill Health Service is the second of two clinics studied, the first having been the Central City Clinic of the Philadelphia Mouth Hygiene Association. It remains now to compare the major findings for the two. The comparison in the case of Philadelphia is limited to white children. The group studied there on the average was one year younger.

On the whole the data are quite similar. In both clinics, the percentage of children who completed the initial series was about 60. In both, about a third of the children returned for first recall. A greater proneness to regularity in obtaining treatment among the younger children was also noted in each place. Another finding in the Philadelphia study was confirmed here—the children, as a group, evidenced constant increments in dental needs over two successive equal intervals of time. Children who came back for their second recall required, as a group, about the same volume of services as on the first recall.

The rates for visits per service were alike despite the fact that charges are based on visits in one clinic and on services in the other. Visits per service were as follows:

	New York	Phila- delphia
Prophylaxis.....	1.10	1.02
Deciduous tooth filled.....	1.02	.99
Permanent tooth filled.....	1.09	1.16
Deciduous tooth extracted.....	.78	.77
Permanent tooth extracted.....	.96	.97

The number of teeth per child in need of fillings was consistently somewhat higher in the New York clinic: 7.6 teeth on the initial examination, 4.4 teeth on first recall, and 4.1 teeth on second recall, as against 6.1, 2.9, and 2.4 teeth, respectively, in the Philadelphia clinic. The differences are probably due to the employment in the New York clinic of X-rays as a routine part of the examination, the fact that the New York children were one year older, and the greater average time lapse there between series of treatments. In New York, the average was 11 months between completion of the initial series and the beginning of the first recall, whereas in the Philadelphia clinic it was a little over 7 months. On the other hand the Philadelphia clinic shows a slightly greater incidence of extractions which also accounts for part of the difference.

These differences are to be interpreted cautiously because the comparability of the two groups is not precisely measurable. It is important, rather, to stress how alike the data are. Either because of accumulated neglect or high susceptibility—or both, likely—the children coming to both clinics require a large volume of services. Even the care of the semiannual or annual increment, once the accumulated neglect is presumably taken care of, involves a very substantial number of dental hours. How general this is may have to be determined. If these findings approximate the truth, estimates of the requirements for the complete dental care of children will have to be revised upward.

SUMMARY

1. An analysis has been presented of the dental records of 1,519 clinic patients under 17 years of age. Complete tabulation was made of 1,351 of the records within the limits of the study.

2. The study was made in the Murray Hill Health Service, New York City, a clinic maintained by the Community Service Society of New York providing, among other services, dental care at low cost to individuals who cannot afford treatment by private practitioners.

3. The initial series of treatments was completed by 61 percent of the children. The 61 percent may be separated into 27 percent who failed to return subsequently for further treatment; 22 percent who came back on first recall but were not current in their subsequent treatment, and 12 percent who could be considered up to date in treatment history.

4. Younger children showed a stronger inclination to complete needed treatment. Girls evidenced a somewhat greater perserverance in obtaining treatment than did boys.

5. The children were divided into two groups according to completion or failure to complete the initial series of treatments. The former group was found, upon examination by the dentist, to have an average of 6.8 teeth in need of filling and 0.9 of a tooth in need of

extraction. The latter group required considerably more care: 9.0 teeth per child requiring filling, 1.6 teeth to be extracted.

6. The average interval between completion of the initial series and start of the first recall was 11 months in 448 children who returned for this recall. At first recall they required fillings in 4.4 teeth and the extraction of 0.3 of a tooth per child.

7. Comparison of the children who returned for the first recall with those who did not shows that at initial examination each group had an average of about 8 teeth in need of filling or extraction. This similarity between the two groups suggests that caries susceptibility was not a factor in the selection of the children who returned for first recall.

8. Approximate annual increment in dental need as measured for 142 children who returned for the first recall in 10-15 months was found to be as follows: Fillings, 1.0 deciduous tooth, 3.6 permanent teeth; extractions, 0.2 of a deciduous tooth, and 0.02 of a permanent tooth.

9. Two hundred fourteen children, returning for second recall after an average interval of 9 months, required fillings in 4.1 teeth and the extraction of 0.2 of a tooth per child. This is only slightly less than the services needed on first recall.

10. Average visits per service, combining all the series of treatments, were found to be:

Prophylaxis	1. 10
Deciduous tooth filled	1. 02
Permanent tooth filled	1. 09
Deciduous tooth extracted 78
Permanent tooth extracted 96

11. Comparison with visits and services received in a children's dental clinic in Philadelphia showed marked similarities between the two clinics. While the patients of the New York clinic had a somewhat greater number of teeth requiring care, the differences might be accounted for by use of X-ray on examination in New York, the greater average interval between recalls there, and age differences.

ACKNOWLEDGMENT

The cooperation received from the staff of the Murray Hill Health Service is gratefully acknowledged. Thanks are due especially to Mr. Frank H. Miesse, director of the clinic, and Miss Joelle Long, assistant to the director, whose assistance made the study possible. Advice and assistance were received from Dr. Antonio Ciocco and Dr. Henry Klein of the Division of Public Health Methods. Responsibility for tabulation and for the preparation of the tables was borne by Mrs. Marion Lee Fatt of this Division.

REFERENCES

- (1) Altman, Isidore: Time per service in a children's dental clinic. Pub. Health Rep., 61:1211-19 (Aug. 16, 1946)
- (2) ———: Services and visits in a children's dental clinic. Pub. Health Rep., 62:113-129 (Jan. 24, 1947)

NOTIFIABLE DISEASES, SECOND QUARTER, 1947¹

The figures in the following table are the totals of the monthly morbidity reports received from the State health authorities for April, May, and June 1947. These reports are preliminary and the figures are therefore more or less incomplete and subject to correction by final reports. In most instances they include cases reported in both civilian and military populations. The comparisons made are with similar preliminary reports; but, owing to population shifts in many States since the 1940 census, the figures for some States may not be comparable with those for prior years, especially for certain diseases. Each State health officer has been requested to include in the monthly report for his State all diseases that are required by law or regulation to be reported in the State, although some do not do so. The lists of diseases required to be reported are not the same for each State. Only 11 of the common communicable diseases are notifiable in all the States. In some instances cases are reported, in some States, of diseases that are not required by law or regulation to be reported and the figures are included although manifestly incomplete. There are also variations among the States in the degree of, and checks on, the completeness of reporting of cases of the notifiable diseases; therefore, comparisons as between States may not be justified for certain diseases. As compared with the deaths, incomplete case reports are obvious for such diseases as malaria, pellagra, pneumonia, and tuberculosis, while in many States other diseases, such as puerperal septicemia, rheumatic fever, and Vincent's infection, are not reportable.

In spite of these known deficiencies, however, these monthly reports, which are published quarterly and annually in consolidated form, have proved of value in presenting early information regarding the reported incidence of a large group of diseases and in indicating trends by providing a comparison with similar preliminary figures for prior years. The table gives a general picture of the geographic prevalence of certain diseases, as the States are arranged by geographic areas.

Leaders are used in the table to indicate that no case of the disease was reported.

Consolidated monthly State morbidity reports for April, May, and June 1947

Division and State	Anthrax	Chick- enpox	Con- juncti- vitis	Diph- theria*	Dysen- tery, amebic	Dysen- tery, bacil- lary	Dysen- tery, unde- fined	En- ceph- alitis, infec- tious	Ger- man mea- sles	Hook- worm disease	Influenza	Malaria	Meas- les*	Men- ingitis, menin- gococ- cus*	Mumps	Ophthal- mia	Pella- gra	Pneu- monia, all forms
NEW ENGLAND																		
Maine.....		1,502		15	1			1	70		29	4	1,572	8	526			1
New Hampshire.....		177		1					16		265		172	3	60			88
Vermont.....		527							30		41		2,173	1	181			28
Massachusetts.....		7,077	94	121	4	23		1	299				3,114	15	3,114	56		12
Rhode Island.....		344		14		2			10		7		2,978	6	141			\$ 474
Connecticut.....		3,022	69	3	2	3			121	1	56		10,186	13	1,068			7
MIDDLE ATLANTIC																		
New York.....	11	10,793	6	172	87	82		4	647	\$ 27	\$ 77	104	7,689	94	\$ 2,548	\$ 12		30,017
New Jersey.....	1	12,240		65	9	1	3	1	515		67	22	2,986	27	5,131			726
Pennsylvania.....	3	8,764		172	1			4			33			53	7,991	47	1	1,265
EAST NORTH CENTRAL																		
Ohio.....		4,089	2	92	5	1		1	122		166	2	9,676	58	2,779	\$ 159		812
Indiana.....		831	1	55	1	4		3	18		83	11	1,212	14	416			117
Illinois.....		4,694	103	39	56	22	5		259		263	764	2,692	81	2,073			1,301
Michigan.....		4,309	15	68	9	62		2	286		368	36	3,388	37	2,491	43		1,555
Wisconsin.....	1	9,001		21				1	239		888	41	8,118	15	3,220			\$ 131

WEST NORTH CENTRAL									
Minnesota.....	1,906	73	816	3	5	3	5	3	20
Iowa.....	1,007	19	1			6,344	114	5,745	21
Missouri.....	1,987	66	10	2	6	72	54	3,328	15
North Dakota.....	133	8		2				750	29
South Dakota.....	126	1		2				606	5
Nebraska.....	457	14	5		1	207	4	919	14
Kansas.....	673	61	1		2	158	9	92	3
SOUTH ATLANTIC									
Delaware.....	119	5						246	8
Maryland.....	1,315	66	1	3	5	40		11	2
District of Columbia.....	1,539	47	5			2		452	11
Virginia.....	1,393	30		1,248		17,555	26	202	21
West Virginia.....	141				1	5,129	5	3,630	30
North Carolina.....		80	13			38		25	25
South Carolina.....	1,482	70	66	156	8	11,001	38	1,500	34
Georgia.....	704	31	3	18		1,222	1,222	2,013	7
Florida.....	791	16	16	2	1	1,810	46	1,120	10
EAST SOUTH CENTRAL									
Kentucky.....	292	66		2		6,120	32	256	23
Tennessee.....	644	59	13	9	8	2,886	52	762	24
Alabama.....	913	35	4			5,219	166	2,862	28
Mississippi.....	127	54	33	24		851	303	215	11
WEST SOUTH CENTRAL									
Arkansas.....	367	44	45	11	19	5,389	418	806	11
Louisiana.....	181	55	78	16		7,379	55	637	21
Oklahoma.....	282	25	15	2	8	7,176	235	66	9
Texas.....	6,283	205	205	3,206	426	17,825	1,272	3,879	66
MOUNTAIN									
Montana.....	319	1	5		2	1,182	1	1,184	4
Idaho.....	198	15	2	6		380	6	109	1
Wyoming.....	94	5				36		30	
Colorado.....	2,315	58	1	4		1,137	4	904	6
New Mexico.....	327	12	2	2	2	52	6	689	2
Arizona.....	887	31	2		305	1,179	19	806	1
Utah.....	1,085	14		1		497	18	264	1
Nevada.....	151	8		1			1	25	1
PACIFIC									
Washington.....	2,583	28	33	10	31	663	4	320	18
Oregon.....	604	24	4	2	3	499	8	221	9
California.....	14,568	168	67	24		349	32	2,702	76
Total.....	110,965	2,353	805	3,706	2,079	97,318	4,536	101,166	985
Second quarter 1946.....	77,111	3,421	1,067	8,148	1,903	18,678	14,363	398,809	1,407
Median 1942-46.....	12,96,427	2,522	8,809	8,354	1,903	23,340	14,806	289,419	2,164
Alaska, Hawaii Territory, Panama Canal Zone II.									
Alaska.....	40	2	1	16	3	54	17	12	2
Hawaii Territory.....	1,106	4	1	10		7	25	21	3
Panama Canal Zone II.....	50	66	1				187	17	

See footnotes on p. 1376.

Consolidated monthly State morbidity reports for April, May, and June, 1947—Continued

Division and State	Poll- myeli- tis*	Rabies in man	Rheu- matic fever	Rocky Moun- tain spotted fever	Scarlet fever*	Septic sore throat	Small- pox*	Teta- nus	Tra- uma	Trich- inosis	Tuber- culosis, all forms*	Tuber- culosis, respir- atory	Tula- remia	Ty- phoid fever*	Para- ty- phoid fever	Ty- phus fever, er- demie	Undu- lant fever*	Vin- cent's infec- tion	Whoop- ing cough*
NEW ENGLAND																			
Maine.....	2	—	—	—	146	6	—	—	—	—	145	135	—	1	1	—	9	7	275
New Hampshire.....	2	—	—	—	114	36	—	—	—	12	30	40	—	5	—	—	2	11	124
Vermont.....	—	—	—	—	102	—	—	—	—	—	67	—	—	—	—	—	46	—	103
Massachusetts.....	2	—	—	—	1,208	56	—	2	—	10	852	812	1	4	37	—	29	—	1,502
Rhode Island.....	3	—	7	—	140	2	—	—	—	—	176	168	—	4	—	—	74	1	365
Connecticut.....	6	—	—	—	449	58	—	3	1	11	298	276	—	2	—	—	—	—	614
MIDDLE ATLANTIC																			
New York.....	37	—	—	—	13,472	(1)	7	8	—	43	3,486	3,394	—	26	4	7	64	—	2,419
New Jersey.....	12	—	—	—	1,122	34	1	—	—	8	842	—	—	5	2	—	10	—	2,387
Pennsylvania.....	4	—	240	—	2,198	—	—	1	—	—	1,187	—	—	28	11	—	16	—	2,181
EAST NORTH CENTRAL																			
Ohio.....	12	—	42	3	2,738	20	4	5	—	1	1,759	—	2	36	16	1	19	8	2,299
Indiana.....	4	—	—	13	781	56	13	1	—	—	749	712	3	17	2	—	22	1	580
Illinois.....	20	—	63	11	1,023	33	—	12	1	—	2,014	1,842	19	66	1	—	138	90	1,020
Michigan.....	8	—	106	—	1,447	59	1	4	—	1	1,629	—	1	17	10	—	85	—	2,593
Wisconsin.....	1	—	—	—	785	29	5	—	—	—	1,679	—	—	4	1	—	121	—	1,881
WEST NORTH CENTRAL																			
Minnesota.....	10	—	42	—	531	78	—	1	—	—	514	—	3	7	16	—	100	10	419
Iowa.....	10	—	6	—	293	2	1	—	—	—	176	—	—	13	2	—	125	—	347
Missouri.....	12	1	17	4	441	12	5	—	—	—	959	73	12	12	—	—	16	3	436
North Dakota.....	7	—	3	—	50	5	3	—	—	—	73	—	—	—	—	—	—	13	116
South Dakota.....	—	—	—	2	58	1	—	—	1	—	107	—	—	—	—	—	31	3	14
Nebraska.....	11	—	—	—	205	—	1	—	—	—	115	—	—	3	1	—	36	—	202
Kansas.....	2	—	4	—	352	3	2	4	—	—	260	253	6	2	1	1	56	52	576
SOUTH ATLANTIC																			
Delaware.....	1	—	—	4	74	—	—	—	—	—	54	54	—	—	—	—	—	—	39
Maryland.....	7	—	34	29	312	39	—	2	—	—	697	665	2	9	1	—	8	1	1,018
District of Columbia.....	—	—	—	4	93	—	—	—	—	—	552	540	1	—	—	1	—	—	1,261
Virginia.....	6	—	—	19	282	437	—	6	—	—	1,080	1,071	5	18	7	—	21	—	1,174
West Virginia.....	1	—	5	3	154	16	1	1	—	—	527	365	—	11	4	—	1	—	1,389

North Carolina.....	6	202	2	220	17	2	5	838	810	5	14	3	10	7	936
South Carolina.....	4	1	1	39	1,550	2	4	137	137	4	15	4	14	14	1,543
Georgia.....	10	14	1	64	32	1	4	723	719	30	14	14	82	52	18
Florida.....	22	62	1	62	31		6	1,144	1,144	1	12	10	34	16	37
EAST SOUTH CENTRAL															
Kentucky.....	12		6	228	21	4	2	568	548	2	28	3	1		379
Tennessee.....	6	11	6	283	55		3	1,212		18	26	2	2	21	379
Alabama.....	8	1	1	104			8	986		4	9	1	45	35	1,032
Mississippi.....	4		1	50		1		577	564	21	18		13	36	1,187
WEST SOUTH CENTRAL															
Arkansas.....	9		1	41	92		10	533	524	62	35	4	3	11	690
Louisiana.....	9	35	1	59	40	1	9	569	534	27	31	2	13	18	190
Oklahoma.....	5		12	60	16	4	1	808	546	17	18	5	5	17	342
Texas.....	41		2	231	313	5		2,155		9	93	25	175	118	9,053
MOUNTAIN															
Montana.....			5	76	20			92	66	1	4			2	109
Idaho.....	3	18	6	45	69	3		36			2		13	17	148
Wyoming.....	1		6	23	9		1	19		4				3	37
Colorado.....	10	75	10	404	48			474			4	3	15	1	442
New Mexico.....	3			88	6	7	1	468	403		6	1	1		310
Arizona.....	7			84	12		45	618	343		9	1	14		420
Utah.....		16	1	170	7			24	23	5		10	22		134
Nevada.....	1	4	1	21	12		2	41					1	10	19
PACIFIC															
Washington.....	14	76		314	31			433			5	10	10	368	325
Oregon.....	4	12	2	225	46		1	256	250		19	1		5	255
California.....	176	308		1,522	144	20	9	2,860	2,069	3	50	30	5	81	4,090
Total.....	536	1,340	170	22,993	3,532	73	125	34,608	19,533	303	699	10	409	1,529	45,439
Second quarter 1946.....	1,339	1,410	176	26,223	1,985	150	111	30,514	16,342	221	794	218	716	1,544	28,148
Median 1942-46.....	680	9	168	43,121	1,985	150	111	31,101	18,233	221	10	1,056	716	1,108	36,960
Alaska.....															
Hawaii Territory.....	14			7	1		2	148	141		5	1	6	1	508
Panama Canal Zone ..	8				9			467	457		1		4		

See footnotes on p. 1376.

FOOTNOTES FOR TABLE ON PAGES 1372 TO 1375

Diseases marked with an asterisk () are reportable by law or regulation in all the States, including the District of Columbia. Typhoid fever is reportable in all the States; Paratyphoid fever in all except 6 States. Syphilis is reportable in all the States and the District of Columbia but is not included in the table. Some States have increased and some have reduced the list of reportable diseases since the latest published compilation of reportable diseases (PUBLIC HEALTH REPORTS, 58:317-340) (Mar. 10, 1944. Reprint No. 2644).

¹ For report for first quarter of 1947 see p. 890 of the PUBLIC HEALTH REPORTS for June 13, 1947.

² Includes cases of kerato- and suppurative conjunctivitis and of pink eye.

³ In a few States practically all cases contracted outside continental United States.

⁴ Ophthalmia neonatorum.

⁵ Lobar pneumonia only.

⁶ New York City only.

⁷ Exclusive of 47 cases of artificially induced malaria.

⁸ Includes nonresidents.

⁹ Includes 2 cases acquired by blood transfusion.

¹⁰ Off-shipping.

¹¹ Includes the cities of Colon and Panama.

¹² In the Canal Zone only.

¹³ Includes septic sore throat.

¹⁴ Included in "scarlet fever."

¹⁵ Reported as "salmonella infection."

¹⁶ Includes cases reported as "salmonella infection."

¹⁷ Includes delayed reports.

¹⁸ Includes paratyphoid fever.

The following list includes certain rare conditions, diseases of restricted geographical distribution, and those reportable in or reported by only a few States; last year's figures in parentheses (where no figures are given, no cases were reported last year):

Actinomycosis: Massachusetts 1, Illinois 1 (1), Minnesota 5 (4), Oklahoma 1, Hawaii Territory 1.

Botulism: New York 1, New Mexico 2, California 6 (3).

Coccidioidomycosis: Washington 1, California 18 (7).

Colorado tick fever: Wyoming 3 (3), Colorado 65 (27).

Dengue: South Carolina 6 (6), Louisiana 1, Texas 7 (7).

Diarrrhea: New York 90, New Jersey 21 (2), Pennsylvania 21, Ohio 129 (15), including enteritis, Illinois 57 (59), Michigan 1, Kansas 76, including enteritis, Maryland 42 (20), South Carolina 4,071 (4,015), Florida 10 (19), Idaho 2, New Mexico 9 (1), Washington 7, Oregon 12, including enteritis, California 34 (2).

Dog bite: New Hampshire 5, Illinois 4,264 (3,982) all animal bites, Michigan 2,292 (2,688), Arkansas 190 (220) all animal bites.

Epilepsy: Minnesota 1.

Food poisoning: New Jersey 1, Illinois 48 (5), Louisiana 4 (14), Idaho 4 (1), New Mexico 25, Nevada 2 (3), Washington 13 (20), Oregon 33, California 146 (157).

Glanders: Indiana 1.

Granuloma inguinale: Missouri 4 (3), Florida 47 (56), Tennessee 16 (31), Mississippi 94 (144), Louisiana 67 (75).

Impetigo contagiosa: New York 30, Ohio 3 (6), Indiana 29 (12), Illinois 3 (6), Michigan 244 (177), Missouri 5, North Dakota 3 (2), Kansas 4, Montana 10 (7), Idaho 28 (2), Wyoming 1 (3), Colorado 37 (18), Nevada 19 (47), Washington 90 (144), Alaska 2, Hawaii Territory 2 (2).

Jaunderice (including hepatitis and Weil's disease): Maine 6 (3), New York 120, Pennsylvania 10 (17), Ohio 2 (2), Illinois 5 (46), Minnesota 5 (26), South Dakota 6, Maryland 2 (5), Florida 7 (11), Tennessee 3, Oklahoma 1, Idaho 2 (9), Wyoming 1, Utah 8 (9), Washington 4 (16), Oregon 25 (12), California 39 (69), Hawaii Territory 1 (2).

Leprosy: Pennsylvania 1, Ohio 2, Kansas 1, Louisiana 2 (1), Texas 7 (2), California 3 (4), Hawaii Territory 11 (7).

Lymphocytic choriomeningitis: Massachusetts 1, Minnesota 3, Tennessee 1 (5).

Lymphogranuloma venereum: Missouri 7 (3), Florida 42 (40), Tennessee 29 (30), Louisiana 16 (26).

Plague (human): California 1 (fatal).

Pstitis: California 1 (3).

Puerperal septicaemia: New York 2, Tennessee 1 (1), Mississippi 1 (48), Louisiana 3 (1), New Mexico 1 (1).

Rabies in animals: New York 157 (299), Ohio 259 (243), Illinois 105 (85), Michigan 118 (5), Nebraska 10, Kansas 9 (4), Maryland 1 (18), West Virginia 8 (1), South Carolina 53 (43), Florida 147 (15), Alabama 139 (229), Arkansas 20 (44), Louisiana 5 (12), Texas 293 (373), Colorado 1 (2), New Mexico 3 (1), California 52 (152).

Rat bite fever: Oklahoma 1.

Replasing fever: Texas 3 (4), Nevada 3, Oregon 1, California 2.

Ringworm: Pennsylvania 121 (114), Ohio 23 (18), Illinois 755 (scalp); Michigan 346 (204), Minnesota 21 (47), Iowa 272 (3) (scalp), Kansas 3, Maryland 3, Kentucky 17, Montana 1 (1), Idaho 19 (4), Utah 22 (250), Nevada 2 (1), Washington 77 (99).

Sebias: Pennsylvania 154 (63), Ohio 6 (2), Michigan 204 (211), Missouri 16 (9), North Dakota 5, Kansas 15 (3), Montana 8 (9), Idaho 42 (24), Wyoming 1 (1), Alaska 1.

Silicosis: Idaho 1, Wyoming 1, New Mexico 3 (4), Washington 3.

INCIDENCE OF DISEASE

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

UNITED STATES

REPORTS FROM STATES FOR WEEK ENDED AUGUST 30, 1947

Summary

A further increase occurred in the incidence of poliomyelitis during the week. Increases were reported in 4 geographic divisions—the New England, Middle Atlantic, East North Central, and Pacific—although slight increases occurred in certain States in all other areas. The current week's total is 602 cases (a smaller number than reported for the corresponding week of any year since 1942), as compared with 531 last week, 1,780 for the corresponding week last year, and a 5-year (1942-46) median of 956. The 14 States reporting currently more than 12 cases or showing an increase of 5 or more cases are as follows (last week's figures in parentheses): *Increases*—Rhode Island 18 (13), Connecticut 13 (6), New Jersey 26 (16), Pennsylvania 31 (21), Illinois 93 (53), Michigan 59 (25), Tennessee 6 (1), California 25 (22); *decreases*—Massachusetts 26 (27), New York 53 (54), Ohio 39 (50), Minnesota 19 (20), Nebraska 13 (18), Delaware 28 (29). The total for the 24-week period since March 15 (the approximate average date of seasonal low incidence) is 3,185 as compared with 11,967 for the corresponding period last year and a 5-year median of 5,759.

No case of smallpox was reported during the week. All of the 16 reported cases of Rocky Mountain spotted fever occurred in the South Atlantic and South Central areas. The total for the year to date is 444 cases, as compared with 476 for the same period last year and a 5-year median of 389. Of 142 cases of undulant fever, 39 occurred in Iowa (last week 38), and of 29 cases of infectious encephalitis, 11 were reported in North Dakota (last week 20). Other diseases reported currently above corresponding medians are measles, tularemia, and whooping cough. To date 1,051 cases of tularemia have been reported, as compared with 647 for the same period last year and a 5-year median of 615.

A total of 8,388 deaths was recorded for the week in 93 large cities of the United States, as compared with 8,348 last week, 7,918 and 8,549, respectively, for the corresponding weeks of 1946 and 1945, and a 3-year (1944-46) median of 7,918. The total to date for these cities is 326,903, as compared with 321,066 for the same period last year.

Telegraphic morbidity reports from State health officers for the week ended Aug. 30, 1947, and comparison with corresponding week of 1946 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—		Med- ian 1942- 46	Week ended—		Med- ian 1942- 46	Week ended—		Med- ian 1942- 46	Week ended—		Med- ian 1942- 46
	Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947	Aug. 31, 1946	
NEW ENGLAND												
Maine.....	1	2	0				3	7	9	0	1	1
New Hampshire.....	0	0	0					1		0	0	0
Vermont.....	0	1	0				5	15	14	0	0	0
Massachusetts.....	5	6	3				20	35	35	0	1	2
Rhode Island.....	0	0	0	1	1			12	5	0	0	0
Connecticut.....	0	1	1				6	16	11	1	0	3
MIDDLE ATLANTIC												
New York.....	9	11	10	12	15	12	134	73	50	4	4	8
New Jersey.....	2	5	2	1	1	1	41	29	12	1	1	1
Pennsylvania.....	2	7	7	(2)	(2)	(2)	16	49	27	3	2	11
EAST NORTH CENTRAL												
Ohio.....	4	4	4				28	58	27	0	5	5
Indiana.....	1	2	4			3	2	1	1	2	0	1
Illinois.....	0	7	5	2		1	49	14	14	3	1	3
Michigan ¹	1	6	6			1	42	28	24	1	2	5
Wisconsin.....	0	3	2	1	11	11	71	51	51	0	0	1
WEST NORTH CENTRAL												
Minnesota.....	2	7	3				25	5	5	0	0	1
Iowa.....	2	1	2				11	4	2	0	3	0
Missouri.....	3	3	2				7	1	4	0	3	3
North Dakota.....	0	2	1	1		5	11	1	3	0	1	1
South Dakota.....	0	1	2				5		2	0	0	0
Nebraska.....	0	2	2				1	4	1	1	1	0
Kansas.....	4	6	6		3		6	3	5	0	0	1
SOUTH ATLANTIC												
Delaware.....	0	0	0					1		0	1	1
Maryland ²	13	13	5		4	1	6	33	9	2	4	0
District of Columbia.....	0	0	0				5	2	1	0	4	0
Virginia.....	1	4	5	26	82	44	9	7	5	0	1	1
West Virginia.....	7	2	2	6			26	3	2	2	0	1
North Carolina.....	13	9	27				4	15	10	0	2	2
South Carolina.....	3	1	10	133	86	86	6	7	4	0	0	0
Georgia.....	4	3	9	1		5	3	4	4	1	0	0
Florida.....	13	4	6	4		2	3	4	4	1	1	2
EAST SOUTH CENTRAL												
Kentucky.....	0	6	7			1		1	2	1	0	1
Tennessee.....	8	6	6	7	106	5	6	6	5	1	2	1
Alabama.....	2	8	8		13	13	7	7	5	2	3	2
Mississippi ³	10	10	10	1			1			0	0	0
WEST SOUTH CENTRAL												
Arkansas.....	2	8	8	3	4	4	4		6	2	1	1
Louisiana.....	2	2	2	1		1	3			1	0	0
Oklahoma.....	0	0	3	5	1	3		2	5	2	0	0
Texas.....	13	11	18	82	254	226	24	29	28	0	4	4
MOUNTAIN												
Montana.....	0	0	2				5	14	14	1	0	0
Idaho.....	0	1	0	2	12		5	3	3	0	0	0
Wyoming.....	0	1	0				1	5	3	0	0	0
Colorado.....	6	1	3	5	1	4	6	5	5	0	1	0
New Mexico.....	1	0	1	1	2	2	1	1	2	0	0	0
Arizona.....	3	1	1	16	17	17	1	9	4	0	1	0
Utah ⁴	1	0	0				8	64	19	0	0	0
Nevada.....	0	0	0							0	0	0
PACIFIC												
Washington.....	4	11	5				10	2	30	0	0	2
Oregon.....	1	0	1	2		3	6	11	12	2	0	1
California.....	10	14	15	7	4	10	47	64	64	4	6	6
Total.....	153	193	205	310	617	565	680	706	668	38	56	61
35 weeks.....	7,389	10,334	7,871	303,787	193,041	82,813	185,502	640,085	539,146	2,562	4,568	6,329
Seasonal low week ⁴	(27th July 5-11)			(30th) July 26-Aug. 1			(35th) Aug. 30-Sept. 5			(37th) Sept. 13-19		
Total since low.....	1,092	1,706	1,496	2,274	2,844	2,740	208,389	666,209	577,159	3,534	6,072	8,781

¹ New York City only.

² Philadelphia only.

³ Period ended earlier than Saturday.

⁴ Dates between which the approximate low week ends. The specific date will vary from year to year.

Telegraphic morbidity reports from State health officers for the week ended Aug. 30, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

Division and State	Poliomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever		
	Week ended—		Median 1942-46	Week ended—		Median 1942-46	Week ended—		Median 1942-46	Week ended—		Median 1942-46
	Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947	Aug. 31, 1946		Aug. 30, 1947*	Aug. 31, 1946	
NEW ENGLAND												
Maine.....	4	4	1	5	10	10	0	0	0	0	0	1
New Hampshire.....	2	7	3	0	0	2	0	0	0	0	0	0
Vermont.....	6	0	0	0	3	1	0	0	0	0	0	0
Massachusetts.....	26	18	20	13	11	32	0	0	0	8	12	7
Rhode Island.....	18	5	1	2	0	2	0	0	0	1	0	1
Connecticut.....	13	3	20	5	3	8	0	0	0	0	2	2
MIDDLE ATLANTIC												
New York.....	53	89	89	34	72	66	0	0	0	3	20	13
New Jersey.....	26	21	21	8	21	18	0	0	0	4	5	5
Pennsylvania.....	31	14	14	19	22	41	0	0	0	8	9	11
EAST NORTH CENTRAL												
Ohio.....	39	43	33	31	57	53	0	0	0	1	7	13
Indiana.....	7	27	22	4	9	11	0	0	0	0	1	3
Illinois.....	93	201	94	18	32	32	0	0	0	3	2	3
Michigan ²	59	87	18	38	26	26	0	0	0	1	3	3
Wisconsin.....	9	184	18	12	17	35	0	0	0	0	0	1
WEST NORTH CENTRAL												
Minnesota.....	19	208	11	9	11	15	0	0	0	0	0	0
Iowa.....	12	24	24	13	10	10	0	0	0	3	2	2
Missouri.....	10	63	29	5	6	11	0	0	0	1	1	4
North Dakota.....	11	74	2	0	0	2	0	0	0	0	0	0
South Dakota.....	3	22	1	5	1	2	0	0	0	0	0	1
Nebraska.....	13	51	9	2	3	3	0	0	0	0	0	0
Kansas.....	4	48	15	5	2	20	0	0	0	0	1	1
SOUTH ATLANTIC												
Delaware.....	28	1	3	1	1	2	0	0	0	0	0	0
Maryland ²	8	10	3	5	18	11	0	0	0	2	1	1
District of Columbia.....	1	4	4	2	2	2	0	0	0	0	3	1
Virginia.....	7	8	8	7	4	8	0	0	0	2	1	3
West Virginia.....	4	5	5	5	18	23	0	0	0	1	1	4
North Carolina.....	9	5	5	8	11	27	0	0	0	4	1	1
South Carolina.....	0	0	1	5	1	4	0	0	0	7	0	4
Georgia.....	4	8	6	7	7	7	0	0	0	4	3	6
Florida.....	3	10	2	4	2	2	0	0	0	4	3	2
EAST SOUTH CENTRAL												
Kentucky.....	0	6	6	2	2	14	0	0	0	4	2	7
Tennessee.....	6	18	5	13	8	19	0	0	0	1	1	7
Alabama.....	1	24	2	3	5	7	0	0	0	1	1	3
Mississippi ²	3	20	3	2	4	7	0	0	0	0	3	2
WEST SOUTH CENTRAL												
Arkansas.....	3	23	4	4	1	1	0	0	0	11	3	5
Louisiana.....	1	16	1	1	18	1	0	0	0	2	2	3
Oklahoma.....	1	14	14	0	2	4	0	0	0	1	0	3
Texas.....	3	23	23	20	18	18	0	0	0	9	8	13
MOUNTAIN												
Montana.....	2	9	2	9	3	6	0	0	0	0	2	1
Idaho.....	12	2	1	8	1	2	0	0	0	1	2	1
Wyoming.....	0	14	2	5	0	1	0	0	0	0	1	0
Colorado.....	0	77	15	3	5	10	0	0	0	0	1	1
New Mexico.....	2	11	1	0	1	3	0	0	0	2	0	2
Arizona.....	3	7	1	1	3	2	0	0	0	0	3	3
Utah ²	0	11	11	3	11	4	0	0	0	1	0	0
Nevada.....	0	0	0	1	2	0	0	0	0	1	0	0
PACIFIC												
Washington.....	11	28	19	13	14	14	0	0	0	0	3	2
Oregon.....	7	15	11	7	3	7	0	0	0	3	2	1
California.....	25	218	33	35	46	58	0	0	0	11	10	2
Total.....	602	1,780	956	402	527	683	0	0	3	105	123	169
35 weeks.....	3,797	12,434	6,156	63,252	87,912	99,317	147	279	307	2,485	2,785	3,506
Seasonal low week ⁴	(11th) Mar. 15-21			(32nd) Aug. 9-15			(35th) Aug. 30-Sept. 5			(11th) Mar. 15-21		
Total since low.....	3,185	11,967	5,759	1,149	1,617	1,951	201	355	424	2,000	2,310	2,780

¹ Period ended earlier than Saturday.

² Dates between which the approximate low week ends. The specific date will vary from year to year.

³ Including paratyphoid fever reported separately, as follows: Massachusetts 7 (salmonella infection); New York 1; Virginia 1; Florida 1; Tennessee 1; Arkansas 2; Louisiana 1; Oregon 1; California 2.

⁴ Delayed report: Poliomyelitis, Arkansas week ended July 26, 1 case; included in cumulative total only.

Telegraphic morbidity reports from State health officers for the week ended Aug. 30, 1947, and comparison with corresponding week of 1946 and 5-year median—Con.

Division and State	Whooping cough			Week ended Aug. 30, 1947							
	Week ended—		Median 1942-46	Dysentery			Enceph- alitis, infectious	Rocky Mt. spot- ted fever	Tula- remia	Ty- phus fever, en- demic	Un- du- lant fever
	Aug. 30, 1947	Aug. 31, 1946		Ame- bic	Bacil- lary	Un- spec- ified					
NEW ENGLAND											
Maine.....	15	1	16								
New Hampshire.....											
Vermont.....	46	23	23								5
Massachusetts.....	147	108	108		1						1
Rhode Island.....	34	12	10		3						
Connecticut.....	38	23	30	1						1	3
MIDDLE ATLANTIC											
New York.....	170	134	258	2	1					1	5
New Jersey.....	148	123	127								2
Pennsylvania.....	268	96	133								
EAST NORTH CENTRAL											
Ohio.....	368	87	123	1							2
Indiana.....	33	26	26				1				1
Illinois.....	160	146	146	2			1		1		8
Michigan ¹	246	249	221				2				6
Wisconsin.....	205	295	208						1		10
WEST NORTH CENTRAL											
Minnesota.....	130	1	41	1			1				4
Iowa.....	38	41	11				2				39
Missouri.....	32	13	13			1	2				
North Dakota.....	7	1	11				11				
South Dakota.....			4				1				4
Nebraska.....	5	1	3	1							3
Kansas.....	25	20	32								1
SOUTH ATLANTIC											
Delaware.....	2	7	3								
Maryland ¹	105	43	46			2		3			
District of Columbia.....	26	20	10								
Virginia.....	45	37	23				81	1	1		2
West Virginia.....	13	34	23					1			
North Carolina.....	28	43	95	1				7	2		
South Carolina.....	70	14	58	1	13					1	1
Georgia.....	31	2	13	1	1			1	1	15	1
Florida.....	31	33	19	1						3	4
EAST SOUTH CENTRAL											
Kentucky.....	16	13	34								
Tennessee.....	16	23	27			1	1			1	2
Alabama.....	15	16	16				1	1		13	2
Mississippi ¹	5			1	4				1		1
WEST SOUTH CENTRAL											
Arkansas.....	26	1	8	7		1			2		4
Louisiana.....	4		1	3						3	1
Oklahoma.....	14	1	4	4				2			2
Texas.....	226	138	138	7	226	25				12	15
MOUNTAIN											
Montana.....	6	3	17								1
Idaho.....	13	6	1								3
Wyoming.....			1						1		
Colorado.....	55	11	32			1					3
New Mexico.....	8	19	9		1	5					
Arizona.....	15	4	6			38					
Utah ¹	11	8	24						3		1
Nevada.....											
PACIFIC											
Washington.....	30	26	36								1
Oregon.....	14	8	12	1							1
California.....	123	60	129	1	2		6		1		3
Total.....	3,053	1,970	2,124	36	252	155	29	16	14	50	142
Same week, 1946.....	1,970			64	202	105	18	28	9	78	97
Median, 1942-46.....	2,124			39	447	218	25	14	9	128	85
35 weeks: 1947.....	109,177			2,058	10,962	6,884	325	444	1,051	1,410	4,154
1946.....	68,302			1,644	12,107	4,742	425	476	647	2,286	3,445
Median, 1942-46.....	88,869			1,274	12,107	5,230	425	389	615	2,469	3,349

¹ Period ended earlier than Saturday.

² Delayed reports: Tularemia, Arkansas 18 cases; included in cumulative total only.

³ 2-year average, 1945-46.

Territory of Hawaii, week ended August 30, 1947: Bacillary dysentery 1; influenza 1; measles 1; poliomyelitis 1; endemic typhus fever 1; whooping cough 7. Correction: Endemic typhus fever, week ended August 23, 3 cases (instead of 2).

WEEKLY REPORTS FROM CITIES ¹

City reports for week ended Aug. 23, 1947

This table lists the reports from 90 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.

Division, State, and City	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland.....	0	0	-----	0	-----	0	1	0	0	0	0	11
New Hampshire:												
Concord.....	0	0	-----	0	-----	0	2	0	0	0	0	-----
Vermont:												
Barre.....	0	0	-----	0	-----	0	0	0	0	0	0	-----
Massachusetts:												
Boston.....	2	0	-----	0	12	0	4	3	4	0	2	15
Fall River.....	0	0	-----	0	-----	0	0	1	1	0	0	16
Springfield.....	0	0	-----	0	-----	0	1	0	1	0	0	5
Worcester.....	0	0	-----	0	1	0	6	1	0	0	0	-----
Rhode Island:												
Providence.....	0	0	-----	0	-----	0	2	6	1	0	0	20
Connecticut:												
Bridgeport.....	0	1	-----	0	-----	0	1	0	0	0	0	2
Hartford.....	0	0	1	0	2	0	0	0	0	0	1	-----
New Haven.....	0	0	-----	0	-----	1	0	1	1	0	0	12
MIDDLE ATLANTIC												
New York:												
Buffalo.....	1	0	-----	0	-----	0	3	0	0	0	0	8
New York.....	6	1	1	1	43	1	50	10	9	0	4	62
Rochester.....	0	0	-----	0	-----	0	1	4	0	0	0	4
Syracuse.....	0	0	-----	0	-----	0	2	5	3	0	0	30
New Jersey:												
Camden.....	0	0	-----	0	-----	0	1	1	0	0	0	1
Newark.....	0	0	-----	0	6	0	0	0	1	0	1	35
Trenton.....	0	0	-----	0	1	0	1	0	0	0	0	4
Pennsylvania:												
Philadelphia.....	2	0	-----	0	5	2	9	2	11	0	2	90
Pittsburgh.....	0	0	-----	0	-----	1	5	4	1	0	0	49
Reading.....	0	0	-----	0	2	0	2	0	1	0	0	1
EAST NORTH CENTRAL												
Ohio:												
Cincinnati.....	0	0	-----	0	-----	0	0	10	2	0	1	14
Cleveland.....	0	0	-----	1	4	0	5	4	1	0	0	180
Columbus.....	0	0	-----	0	5	1	1	0	1	0	0	16
Indiana:												
Fort Wayne.....	0	0	-----	0	-----	0	0	0	0	0	0	2
Indianapolis.....	0	0	1	0	-----	0	0	2	1	0	4	4
South Bend.....	0	0	-----	0	-----	0	0	0	0	0	0	1
Terre Haute.....	0	0	-----	0	-----	0	4	0	0	0	1	1
Illinois:												
Chicago.....	3	0	-----	0	21	0	17	28	6	0	0	42
Michigan:												
Detroit.....	1	0	-----	0	2	3	4	5	8	0	0	121
Flint.....	0	0	-----	0	-----	0	2	3	1	0	0	-----
Grand Rapids.....	0	0	-----	0	2	0	1	0	1	0	0	18
Wisconsin:												
Kenosha.....	0	0	-----	0	4	0	0	0	0	0	0	12
Milwaukee.....	0	0	-----	0	1	0	0	3	0	0	1	33
Racine.....	0	0	-----	0	6	0	0	1	2	0	0	9
Superior.....	0	0	-----	0	1	0	0	0	0	0	0	14
WEST NORTH CENTRAL												
Minnesota:												
Duluth.....	0	0	-----	0	1	0	1	1	2	0	0	23
Minneapolis.....	0	0	-----	0	10	0	4	3	2	0	0	9
St. Paul.....	0	0	-----	0	8	0	4	4	1	0	0	54
Missouri:												
Kansas City.....	0	0	-----	0	-----	0	5	1	1	0	0	8
St. Joseph.....	0	0	-----	0	-----	0	0	0	0	0	1	-----
St. Louis.....	0	0	-----	0	4	0	4	0	1	0	2	23

¹In some instances the figures include nonresident cases.

City reports for week ended Aug. 23, 1947—Continued

Division, State, and City	Diphtheria cases	Etiophellitis, 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								
WEST NORTH CENTRAL—continued												
North Dakota:												
Fargo.....	0	8	-----	0	-----	0	0	3	0	0	0	4
Nebraska:												
Omaha.....	0	0	-----	0	1	0	1	2	0	0	0	2
Kansas:												
Topeka.....	0	0	-----	0	1	0	0	0	0	0	0	14
Wichita.....	0	0	-----	0	-----	0	1	0	1	0	0	3
SOUTH ATLANTIC												
Delaware:												
Wilmington.....	0	0	-----	0	-----	0	1	17	0	0	1	2
Maryland:												
Baltimore.....	0	0	-----	1	3	0	6	1	2	0	0	78
Cumberland.....	3	0	-----	0	-----	0	0	1	0	0	0	-----
Frederick.....	0	0	-----	0	-----	0	0	0	0	0	0	-----
District of Columbia:												
Washington.....	0	0	-----	0	5	0	3	0	5	0	0	22
Virginia:												
Lynchburg.....	0	0	-----	0	-----	0	0	0	0	0	0	3
Richmond.....	0	0	-----	1	-----	0	1	1	0	0	0	-----
Roanoke.....	0	0	-----	0	-----	0	0	0	1	0	0	-----
West Virginia:												
Charleston.....	0	0	-----	0	-----	0	0	0	0	0	0	-----
Wheeling.....	0	0	-----	0	2	0	1	0	0	0	0	-----
North Carolina:												
Raleigh.....	0	0	-----	0	-----	0	1	1	0	0	0	-----
Wilmington.....	1	0	-----	0	-----	0	0	0	0	0	0	1
Winston-Salem.....	0	0	-----	0	1	0	0	0	0	0	0	-----
South Carolina:												
Charleston.....	0	1	1	0	2	0	0	0	0	0	0	2
Georgia:												
Atlanta.....	0	0	-----	0	-----	0	1	0	1	0	0	4
Brunswick.....	0	0	-----	0	-----	0	0	0	0	0	0	-----
Savannah.....	0	0	-----	0	-----	0	0	0	0	0	0	11
Florida:												
Tampa.....	0	0	1	1	1	0	1	0	0	0	0	-----
EAST SOUTH CENTRAL												
Tennessee:												
Memphis.....	1	0	-----	0	1	0	9	1	1	0	0	2
Nashville.....	0	0	-----	0	-----	0	2	0	0	0	0	4
Alabama:												
Birmingham.....	0	0	-----	0	-----	0	0	4	0	0	0	2
Mobile.....	1	0	-----	0	-----	0	1	0	0	0	1	-----
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock.....	0	0	-----	0	-----	0	0	0	0	0	0	3
Louisiana:												
New Orleans.....	0	0	2	1	4	0	4	0	1	0	1	-----
Shreveport.....	0	0	-----	0	-----	0	2	0	0	0	1	-----
Oklahoma:												
Oklahoma City.....	0	0	-----	0	-----	0	6	0	0	0	1	9
Texas:												
Dallas.....	0	0	-----	0	-----	0	1	0	0	0	1	2
Galveston.....	1	0	-----	0	-----	0	2	0	0	0	0	1
Houston.....	1	0	-----	0	-----	0	2	1	0	0	0	-----
San Antonio.....	0	0	-----	0	-----	0	3	0	0	0	0	2
MOUNTAIN												
Montana:												
Billings.....	0	0	-----	0	1	0	0	0	0	0	0	-----
Great Falls.....	0	0	-----	0	1	0	0	0	2	0	0	2
Helena.....	0	0	-----	0	-----	0	0	0	0	0	0	-----
Missoula.....	0	0	-----	0	-----	0	1	0	0	0	0	-----
Idaho:												
Boise.....	0	0	-----	0	-----	0	0	3	5	0	0	3
Colorado:												
Denver.....	1	0	-----	0	2	0	4	0	4	0	0	35
Pueblo.....	0	0	-----	0	1	0	0	0	0	0	0	18
Utah:												
Salt Lake City.....	0	0	-----	0	3	0	2	0	1	0	0	4

City reports for week ended Aug. 23, 1947—Continued

Division, State, and City	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								
PACIFIC												
Washington:												
Seattle.....	1	0		0		0	3	2	1	0	0	6
Spokane.....	0	0		0	1	0	0	0	0	0	0	
Tacoma.....	0	0		0	1	0	0	0	0	0	0	
California:												
Los Angeles.....	3	0	1	0		1	0	9	0	0	0	32
Sacramento.....	1	0		0	1	0	0	0	0	0	0	3
San Francisco.....	2	0		0	10	0	4	0	5	0	1	1
Total.....	31	11	8	6	183	10	206	152	95	0	27	1,224
Corresponding week, 1946*	53		2	1	189		167		160	0	34	651
Average 1942-46*	46		22	5	193		208		189	0	30	822

* Exclusive of Oklahoma City.

* 3-year average, 1944-46.

* 5-year median, 1942-46.

Anthrax.—Cases: Philadelphia 1.

Dysentery, amebic.—Cases: New York 5; New Orleans 1.

Dysentery, bacillary.—Cases: Worcester 1; Baltimore, 1; Oklahoma City 1.

Dysentery, unspecified.—Cases: Baltimore 2; San Antonio 4.

Rocky Mountain spotted fever.—Cases: New York 1; Baltimore 1; Washington, D. C., 1.

Typhoid fever.—Cases: Houston 1.

Typhus fever, endemic.—Cases: Tampa 1; Dallas 1; Houston 1.

Rates (annual basis) per 100,000 population, by geographic groups, for the 90 cities in the preceding table (latest available estimated population, 34,322,300)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Polymyelitis 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.....	5.2	2.6	2.6	0.0	39	2.6	44.4	31.4	21	0.0	7.8	212
Middle Atlantic.....	4.2	0.5	0.5	0.5	28	1.9	34.3	12.0	12	0.0	3.2	131
East North Central.....	2.5	0.0	0.6	0.6	28	2.5	20.9	34.3	14	0.0	4.3	286
West North Central.....	0.0	15.9	0.0	0.0	50	0.0	39.8	27.9	16	0.0	6.0	279
South Atlantic.....	6.5	1.6	3.3	4.9	23	0.0	24.5	34.3	15	0.0	1.6	201
East South Central.....	11.8	0.0	0.0	0.0	6	0.0	70.8	29.5	6	0.0	5.9	47
West South Central.....	5.1	0.0	5.1	2.5	10	0.0	59.8	2.5	3	0.0	10.2	43
Mountain.....	7.9	0.0	0.0	0.0	64	0.0	55.6	23.8	95	0.0	0.0	492
Pacific.....	11.1	0.0	1.6	0.0	21	1.6	11.1	22.1	11	0.0	1.6	66
Total.....	4.7	1.7	1.2	0.9	28	1.5	31.4	23.2	14	0.0	4.1	186

PLAGUE INFECTION IN SAN LUIS OBISPO COUNTY, CALIF.

Plague infection was reported proved on Aug. 25 in a pool of 400 fleas from 82 ground squirrels, *Citellus beecheyi*, taken from a ranch 2 miles northeast of Santa Margarita, San Luis Obispo County, Calif.

TERRITORIES AND POSSESSIONS

Virgin Islands of the United States

Notifiable diseases—April–June 1947.—During the months of April, May, and June 1947, cases of certain notifiable diseases were reported in the Virgin Islands of the United States as follows:

Disease	April	May	June	Disease	April	May	June
Diphtheria.....	-----	1	-----	Malaria.....	-----	1	-----
Filariasis.....	-----	2	2	Schistosomiasis.....	-----	5	-----
Gonorrhea.....	20	15	37	Syphilis.....	24	15	17
Hookworm disease.....	5	16	12	Tetanus.....	-----	-----	1
Leprosy.....	1	-----	-----	Tuberculosis.....	1	5	5
Lymphogranuloma in- guinale.....	1	-----	-----	Typhus fever (murine).....	-----	1	1
				Whooping cough.....	152	-----	1

DEATHS DURING WEEK ENDED AUG. 23, 1947

[From the Weekly Mortality Index, issued by the National Office of Vital Statistics]

	Week ended Aug. 23, 1947	Correspond- ing week, 1946
Data for 92 large cities of the United States:		
Total deaths.....	8,304	8,055
Median for 3 prior years.....	8,055	-----
Total deaths, first 34 weeks of year.....	316,879	311,600
Deaths under 1 year of age.....	682	767
Median for 3 prior years.....	615	-----
Deaths under 1 year of age, first 34 weeks of year.....	25,409	21,508
Data from industrial insurance companies:		
Policies in force.....	67,217,265	66,986,013
Number of death claims.....	10,280	9,925
Death claims per 1,000 policies in force, annual rate.....	8.0	7.7
Death claims per 1,000 policies, first 34 weeks of year, annual rate.....	9.5	9.8

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended August 9, 1947.—During the week ended August 9, 1947, 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.....		7		32	177	9	17	14	44	300
Diphtheria.....				5	5				10	10
Dysentery, bacillary.....						3			1	4
Encephalitis, infectious.....						2				2
German measles.....				4	6			3	5	18
Influenza.....		68			9					77
Measles.....		2		35	74	44	10	18	16	199
Meningitis, meningococcus.....				1	3					4
Mumps.....		7		7	220	8	7	5	24	278
Poliomyelitis.....	1	6	3	8	22	54	31	3	22	150
Scarlet fever.....		1	9	21	22			6	2	61
Tuberculosis (all forms).....			2	66	22	29		8	33	160
Typhoid and paratyphoid fever.....			1	5	1		1	1		9
Undulant fever.....				8	4					12
Venereal diseases:										
Gonorrhea.....		18	10	160	85	26	21	46	59	425
Syphilis.....		8	6	53	55	15	6	8	22	173
Other forms.....									5	5
Whooping cough.....		2	1	9	50	13	5	29	10	119

CUBA

Habana—Communicable diseases—5 weeks ended August 2, 1947.—During the 5 weeks ended August 2, 1947, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Chickenpox.....	6		Measles.....	6	
Diphtheria.....	17	2	Scarlet fever.....	1	
Leprosy.....	4		Tuberculosis.....	6	1
Malaria.....	2		Typhoid fever.....	14	2

Provinces—Notifiable diseases—5 weeks ended August 2, 1947.—During the 5 weeks ended August 2, 1947, cases of certain notifiable diseases were reported in the Provinces of Cuba as follows:

Disease	Pinar del Rio	Habana ¹	Matanzas	Santa Clara	Camaguey	Oriente	Total
Cancer.....	2	12	6	25	3	30	78
Chickenpox.....		6			3	2	11
Diphtheria.....		26	4	2		3	35
Hookworm disease.....		29					29
Leprosy.....		14					14
Malaria.....	10	5	1	1	1	12	30
Measles.....		7		4	4		15
Poliomyelitis.....	1	1	1		1	3	7
Rabies.....					1		1
Scarlet fever.....		1					1
Tuberculosis.....	17	38	12	48	21	66	202
Typhoid fever.....	13	40	16	65	30	54	218
Typhus fever (murine).....						1	1
Whooping cough.....		28				2	30
Yaws.....						1	1

¹ Includes the city of Habana.

GREAT BRITAIN

England and Wales—Poliomyelitis.—For the week ended August 16, 1947, 691 cases of poliomyelitis were reported in England and Wales, making a total to date of 2,943.

JAPAN

Notifiable diseases—5 weeks ended August 2, 1947, and accumulated totals for the year to date.—For the 5 weeks ended August 2, 1947, and for the year to date, certain notifiable diseases were reported in Japan as follows:

Disease	5 weeks ended Aug. 2, 1947		Total reported for the year to date	
	Cases	Deaths	Cases	Deaths
Diphtheria.....	1,780	117	19,093	1,679
Dysentery, unspecified.....	9,374	1,698	13,335	2,469
Encephalitis, Japanese "B".....	4	1	17	14
Gonorrhea.....	22,463		123,124	
Influenza.....	478		² 2,276	
Malaria.....	2,000	1	7,256	15
Measles.....	27,228		² 133,809	
Meningitis, epidemic.....	229	78	2,667	823
Paratyphoid fever.....	715	34	2,328	124
Pneumonia.....	12,747		² 85,167	
Scarlet fever.....	242	3	1,697	38
Smallpox.....	9	2	375	38
Syphilis.....	14,827		83,858	
Tuberculosis.....	41,712		² 145,036	
Typhoid fever.....	2,408	250	8,538	1,016
Typhus fever.....	107	9	976	80
Whooping cough.....	27,144		² 91,043	

¹ Corrected to date.

² For the period Mar. 30, 1947, to Aug. 2, 1947.

NEW ZEALAND

Notifiable diseases—5 weeks ended August 2, 1947.—During the 5 weeks ended August 2, 1947, certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis.....	14	1	Poliomyelitis.....	1	-----
Diphtheria.....	89	1	Puerperal fever.....	5	-----
Dysentery:			Scarlet fever.....	116	-----
Amebic.....	4	-----	Tetanus.....	1	-----
Bacillary.....	33	-----	Trachoma.....	2	-----
Erysipelas.....	25	-----	Tuberculosis (all forms).....	215	67
Food poisoning.....	6	-----	Typhoid fever.....	2	2
Malaria.....	2	-----	Undulant fever.....	3	-----
Ophthalmia neonatorum.....	1	-----			

POLIOMYELITIS IN GREAT BRITAIN AND EUROPE

According to the Weekly Epidemiological Record, issued by the Interim Commission of the World Health Organization dated August 27, the incidence of poliomyelitis has recently been, or currently is, high in some countries in the European area. The following data are summarized from that issue of the Record:

England and Wales.—The abnormal rise began during the week ended June 7, with 22 cases. Week ended August 9, 624 cases, week ended August 16, 691 cases; total to August 16, 2,943 cases. (Includes cases reported as polioencephalitis.)

Eire.—Unusual incidence reported September to December 1946 (130 cases); January–March, 1947, 74 cases. Incidence has declined since March.

Northern Ireland.—Incidence negligible during the first 28 weeks of 1947, but rose rapidly from 3 cases week ended July 19 to 33 week ended August 9. Totals 1945 and 1946 were 13 and 36, respectively.

Scotland.—Incidence was normal in 1945 and 1946, but increased in July 1947 (58 cases; median, 5), and week ended August 9 (93 cases). (August 1928–38 median, 4 cases.)

Belgium.—Epidemic in 1945 (859 cases); 117 cases in 1946 (twice the 1930–38 median). Incidence was at normal expectancy during first half of 1947, but increased to 26 cases in July (median 7; 231 in July 1945, the peak month).

France.—Prevalence in 1946 (1,505 cases) was more than 3 times the 1928–38 median (455 cases). Incidence has continued above normal in 1947, with 71 cases in June and 115 in July (3 to 4 times the respective monthly medians).

Austria.—In 1946 a total of 247 cases was reported (1928–38 median, 205 cases); in the first quarter of 1947, 54 cases (median, 19); After May the incidence rose sharply, with 94 cases in 4 weeks in June, 470 cases during the next 4 weeks, and 247 during the week ended

August 2 (90 in Styria). Between June 22 and August 16, a total of 1,098 cases, with 72 deaths, was reported. Incidence rate as of the latter date was about 20 times the median expectancy.

Hungary.—Incidence rose sharply in June 1947, with 43 cases reported; 4 weeks in July, 201 cases (July median 30); week ended August 2, 104 cases.

Iceland.—Epidemic in 1946—471 cases as compared with a 1928–38 median of 53 (423 cases during last quarter of the year); monthly peak of 158 cases in December. The incidence remained high in January 1947, with 115 cases, then declined rapidly to monthly totals of 6 in April and 4 in May.

Italy.—The epidemic prevalence in 1946 (2,858 cases as compared with a median of 839) continued into 1947, with 770 cases reported in the first 6 months (937 same period in 1946), the monthly incidence rising progressively since February.

Malta.—Sharp outbreak reported between December 1946 and March 1947, with 72 cases (annual median, 3 cases); incidence was back to normal in April and continued until week ended June 28 when 3 cases occurred and 7 cases during the following week.

Norway.—A total of 860 cases was reported in 1946 (1928–38 median 117). Peak of incidence occurred in September with 221 cases. Thereafter the incidence decreased until in January 1947, when only 9 cases were reported; but increased again in May (24 cases, median 7).

Sweden.—The disease was epidemic in 1945, with 2,481 cases (3 times the 1928–38 median); was well below the median in 1946 and continued low during the first 6 months of 1947. During the first half of July, however, 41 cases occurred (as compared with a median of 35 cases for the month).

Switzerland.—The high prevalence in 1946 (932 cases, median 208) had declined to normal levels in April 1947, but 58 cases were reported in June and 112 in July (respective monthly medians, 4 and 23). In the 2 weeks ended August 9, 94 cases were reported (August median 44).

No unusual incidence has been reported in Bulgaria, Czechoslovakia, Denmark, Finland, Greece, the Netherlands, Spain or Yugoslavia; but in the occupied zones of Germany the numbers of cases are stated to have increased considerably in recent weeks.

In the countries reporting an unusual incidence, the regions most seriously affected are as follows: *Austria*—Styria and Carinthia; *England*—London area, Lancaster and the West Riding of Yorkshire; *Scotland*—Western area; *Hungary*—Pest-Pilis; *France*—Departments of Gironde, Ille-et-Vilaine, Maine-et-Loire, Seine, and Seine-et-Oise.

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 recent months. 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.

Cholera

Siam (Thailand).—For the week ended July 19, 1947, 82 cases of cholera with 52 deaths were reported in Siam (Thailand).

Plague

Indochina (French)—Annam.—For the period August 1–10, 1947, 13 cases of plague with 2 deaths were reported in Annam, French Indochina.

Palestine—Isierkij Province.—For the week ended August 2, 1947, 14 cases of plague were reported in Isierkij Province, Palestine.

Peru.—For the month of July 1947, plague was reported in Peru, as follows: Lambayeque Department—Chiclayo, 1 case; Libertad Department—Province of Trujillo, Laredo Farm, 9 cases; Lima Department—Province of Chancay, Valley Huaura, 4 cases, 2 deaths, Valley Pativilca, 2 cases, 1 death.

Smallpox

British East Africa—Tanganyika.—For the week ended August 2, 1947, 126 cases of smallpox (including delayed reports) with 35 deaths were reported in Tanganyika, British East Africa.

Sierra Leone.—For the week ended June 21, 1947, 149 cases of smallpox with 36 deaths were reported in Sierra Leone.

Typhus Fever

Mexico.—For the month of July 1947, 180 cases of typhus fever were reported in Mexico.

Yellow Fever

Colombia—Caldas Department.—Yellow fever has been reported in Caldas Department, Colombia, as follows: June 28, 1947, 1 death at Samana, La Norcasia, San Miguel; week ended July 5, 1947, 2 deaths at La Dorado, Montecristo.