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# DENTAL CARIES PREVALENCE AND TOOTH MORTALITY— A STUDY OF 24,092 GEORGIA CHILDREN IN TWELVE COMMUNITIES <sup>1 2</sup>

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# INTRODUCTION

Sufficient studies have been made to warrant the use of certain methods to gain an understanding of community dental problems (1, 2, 3, 4, 5). Though a dental study limited to dental caries is justified, it should not be inferred that disturbances of the supporting tissues or of tooth and dental arch relationship are of less importance to dental health. Dental caries, however, appears earliest as a widespread occurrence in the population. Tooth loss in younger persons, as a result of dental caries, probably is a contributing cause of disturbances of the tooth-supporting structures in later life. Therefore, it seems basic to gain information on dental caries prevalence at different ages and in different geographic areas. Not only is this understanding a requisite for epidemiological purposes, but it must be given serious consideration in the planning and evaluation of organized dental health activities.

The attack rate of dental caries is influenced by age, sex, familial, geographic, and environmental factors (1, 6, 7). Once the caries process is initiated, the only way to maintain teeth at optimum efficiency is by proper replacement of destroyed tooth structure with a suitable filling material. Hope is afforded from recent research and from the practical application of preventive measures that the inception of dental caries may be averted.

The effectiveness of natural or applied preventive factors and of efforts expended to repair affected teeth may be evaluated by a determination of permanent tooth mortality at several ages. The

<sup>&</sup>lt;sup>1</sup> From the States Relations Division. This study was made at the request of the Georgia Department of Health, Dr. T. F. Abercrombie, State Health Officer, Dr. J. G. Williams, Director of the Dental Division, and Miss Annie Taylor, Dental Health Education Director. The Georgia Dental Association (Dr. W. A. Garrett, President), through its Public Health Committee (Dr. Homer Davis, Chairman), endorsed the study.

<sup>&</sup>lt;sup>2</sup> Reported to the Georgia Dental Association annual meeting at Atlanta May 14, 1946.

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soundness of this method has been discussed by Wisan (8) and Knutson (2, 4). Knowledge of specific tooth loss at a certain age does not give a refined measure of the dental care received, but it does indicate indirectly the efficiency of the several forces which operate to retain teeth for service. These forces may be of the character of natural immunity, of applied preventive measures, or of a constructive community endeavor to provide regular dental care. Manifestly, the rate at which teeth become carious has a great bearing on the rate at which they are lost. Therefore, the caries attack rate should be known before tooth loss rates may be used for the evaluation of efforts to prevent tooth mortality.

#### PURPOSE

In this report the caries attack rate and the tooth mortality rate will be used to define numerically these causative and resultant conditions as they relate to permanent teeth in age-specific children of different communities in Georgia. The report shows (1) the variability of the permanent tooth caries attack rate,<sup>4</sup> (2) an approximation of the number of permanent teeth which have experienced caries in agespecific groups, and (3) the present status of dental care as reflected by permanent tooth mortality in relation to caries attack rates.

The variables, such as age, sex, continuous or broken residence in the area, and in certain places the economic level of the population, are considered in their relation to these three bases.

#### METHOD

The selection of the places reported was based on a variety of subjective factors such as good relationships between local health and school agencies and dental societies, direct requests from communities, and the availability of personnel to conduct the survey. The places surveyed are shown in figure 1 and in the appendix tables. In all places, except Camden County where all ages in school were included, the 7-, 9-, 11-, 14-, and 16-year age groups were examined. The age was determined as of the last birthday.

The factor of residence, continuous or broken, was determined by the answer to the question: Were you born in this county? For this study, birth in a given county was used as the criterion for continuous residence in that county. This criterion appeared adequate although it is recognized that exceptions are not uncommon.

The assignment of children to high, middle, or low economic strata was permissible only in Atlanta, Fulton County, and Savannah.

<sup>&</sup>lt;sup>4</sup> The permanent tooth carries attack rate, shown at times as the symbol DMF, indicates the decayed, missing, or filled permanent teeth and is used as a prevalence rate when related to 1 child or to a standard population such as 100, the number customarily used. The rate indicates the total caries experience in permanent teeth since the character of dental caries is such that its results may be measured cumulatively.





FIGURE I. LOCATION OF PLACES INCLUDED IN THE DENTAL SURVEY, GEORGIA, 1946

The method utilized was (1) the location of schools in the respective census tracts, (2) the stratification of the tracts' median rents of 1940 (9) into three levels, and (3) the assumption that schools located in tracts of a given level drew children from tracts of the same level. This economic assignment appeared valid on the average. In some instances, however, subjective assignments were required. Particularly was this need true in certain high and junior high schools. It is believed, however, that any subjective evidence which is used was obtained in each instance from informed persons with a minimum of bias.

The determination of the caries attack rate is based upon Knutson's (10) description of the relationship <sup>5</sup> between the proportion of age-specific children with caries experience in at least one permanent tooth and the average number of permanent teeth so affected per child. Knutson considers that though a prevalence rate of a kind is obtained by the determination of the proportion of children of a given age with caries experience, quantitative data on the number of teeth so affected per average child frequently is desirable. The use of the proportion of children with caries to estimate the number of permanent teeth affected per child requires that specific ages should be examined which ordinarily do not experience excessive caries attack rates. The character of the catalytic curve which serves as the graphic relationship is such that a wider range of error exists in groups which have a high proportion of children with caries. Because it has been shown that dental caries accrues at a regular rate in a population from 6 to 18 years of age, this restriction is of little consequence.

Tooth mortality from caries experience is shown in the segments of (1) missing permanent teeth and (2) permanent teeth indicated for extraction. The absence of particular permanent teeth in children usually meant loss from caries experience, though the eruption schedule or the improbability of their loss at certain ages required verification by questioning the child. It may be presumed that with judgment on the part of the examiner, inaccuracies were kept to a minimum.

Teeth indicated for loss generally were those which had involvement of the pulp due to caries, as far as inspection would reveal. Undoubtedly there were many errors in this category, but it is felt that a balance was established. The indication for loss should not be construed to mean that certain teeth with pulp involvement cannot be restored for service. Rather it is an indication of the severity of caries experience or evidence of inadequate dental care.

The examinations were conducted by dentists who dictated their findings to assistants. Six dentists in private practice in Savannah and four in Glynn County participated. Two dentists each in Atlanta, Muscogee County, and Columbus, and three in Fulton County were in the full-time employ of either local or Federal health agencies. In all other places the examinations were made by the author. Through specific instructions to the examiners, an attempt was made to standardize the examination and recording procedures.

<sup>&</sup>lt;sup>6</sup> This relationship is described by the formula  $K-Y=KB^{x}$ . K is 97, the upper limit of the proportion of persons who experience dental caries; Y is the observed proportion of age-specific persons with caries experience; B is a constant 0.524; and X is the age-specific quantitative rate of teeth affected by dental caries per child.

### FINDINGS AND DISCUSSION

It is desirable to consider first the caries attack and tooth mortality rates of children who have always lived in a given community. The variability of age specific rates in the several places is evident in figure 2.



The trend lines on each segment of figure 2 were calculated by the method of least squares. Only the 7-, 9-, and 11-year age specific caries attack rates were utilized in making these calculations. These are more accurate estimates of caries experience than are rates obtained for older children. These age specific rates fall very near the trend line. Places with small samples vary widely; this spread is seen particularly in the rates for Spalding and Griffin.

The lack of approximation of the observed caries attack rates at 14 and 16 years to the calculated trend line is of interest. The places with the largest samples, Atlanta, Fulton County, and Savannah, show 14- and 16-year age specific rates which consistently fall below the trend line. The consistency of this finding in sufficiently large groups may serve to substantiate other observations that the prevalence of dental caries is increasing. Brekhus (11) concluded from his studies, made at a 10-year interval, that such was the case among college students. The technique of this Georgia study perhaps is inadequate to justify such a conclusion, but the possibility should not be overlooked that the caries attack rate may have risen.

Table 1 shows the annual accrual of carious teeth per 100 children and indicates the difference from place to place in the rate of increase.

Place	Annual incre- ment of carious teeth per 100 children	Place	Annual incre- ment of carious teeth per 100 children
Albany City.	42	Glynn County.	25
Atlanta City.	77	Griffin City.	90
Camden County.	18	Muscogee County.	43
Columbus City.	64	North Georgia Counties <sup>3</sup> .	57
Floyd County.	46	Savannah City.	44
Fulton County.	66	Spalding County.	90

TABLE 1.—The annual increment  $^{1}$  of permanent teeth which became carious per 100 children whose residence has been continuous in particular places. Georgia. 1946

<sup>1</sup> By the method of least squares, from the 7-9-11-year age specific caries attack rates, the 16-year rate was determined by extrapolation. This rate was divided by 11, the number of years that permanent teeth had been exposed to dental caries, and the result is considered the average annual increment for the 7- to 16-year age span. <sup>2</sup> North Georgia counties: White, Rabun, Towns, and Lumpkin.

These figures determine largely the extent in any given community of the problem of repair of carious defects in any year. A knowledge of these rates, therefore, is essential to efficient program planning. The age specific rates for each place are shown in table 2.

TABLE 2.—The calculated DMF rate by age  $^{1}$  per 100 children examined whose residence has been continuous in the particular place. Georgia, 1946

Place			Age			Disco	Age							
1 Iace	7	9	11	14	16	Flace	7	9	11	14	16			
Albany City Atlanta City Camden County Columbus City Floyd County Fulton County	50 210 40 102 99 77	158 352 72 244 182 216	230 493 122 368 289 368	300 601 149 601 352 459	279 763 141 708 493 601	Glynn County Griffin City Muscogee County North Georgia Savannah City. Spalding County	55 167 62 94 85 244	133 538 153 167 176 386	149 407 244 336 269 763	162 1, 064 300 336 300 1, 064	252 538 407 336 1,064			

As described in the text.

Since the attack rate is a fundamental factor in the study of any disease, the caries attack rate should be considered when the tooth mortality rate is used as an evaluation measure. On the basis of this premise, the different places were arrayed to show tooth mortality in figure 3, in the same order as they appear in figure 2.

Spalding County, Griffin, and Atlanta experience similar caries attack rates yet there is a marked variation in tooth mortality. Though Atlanta is favored by the usual metropolitan concentration of dentists, it is significant also that dental health promotion has been a part of the school curriculum for many years. The individual dental certificate and certain group rewards for 100 percent classrooms have been the media customarily used in the promotion. Atlanta has stimulated its children with a desire to obtain dental care, and dentists generally are available. These factors alone are probably sufficient to account for Atlanta in the places studied, having the lowest mortality rate in relation to caries experience. Spalding County experiences the highest tooth mortality rate in the State.

Apparently no special effort had been made there to control dental caries. Griffin, the city within Spalding County, shows evidence of effort to cope with the problem, tooth mortality rates being significantly lower in the city than in the county.

Most of the Fulton County school system is in the metropolitan area of Atlanta. Children in this area are favored by their proximity to an urban concentration of dentists. The caries attack rate is lower in Fulton County than in Atlanta, but the tooth mortality rate is higher. Atlanta children presumably receive more dental care than do Fulton County children.



The tooth mortality rates of Fulton County appear to be quite favorable when compared with other places having moderately high caries attack rates. This situation has resulted without any promotion of dental health similar to that in Atlanta.

Columbus and north Georgia <sup>6</sup> have caries attack rates similar to those of Fulton County, but higher tooth loss rates. The city of Columbus has a fair amount of dental service available, but north Georgia has relatively little dental service. With proper program planning and dental health education in Columbus, a more favorable tooth loss rate would result. Little hope for the reduction of tooth mortality in north Georgia is held at present because of the inadequacy of dental service available

<sup>&</sup>lt;sup>6</sup> Rabun, White, Towns, and Lumpkin Counties,

<sup>766115-47----2</sup> 

Floyd County, Savannah, Muscogee County, and Albany are next lowest in the caries attack pattern. Floyd County, represented by an urban-rural group of children with a slightly higher attack rate (the 14- and 16-year observations are better fits than the others) experiences a higher tooth mortality rate. Obviously, children in this area receive insufficient dental care.

Muscogee County, in which the city of Columbus is located, has a lower attack rate than the city. Dental care received by the county children probably is no greater than that received by the city children. The lower tooth mortality rate in the county, therefore, seems to be the result of a lower caries attack rate.

Muscogee County and Savannah experience similar caries attack rates, and their tooth mortality rates may be compared on an equal basis. Savannah children have markedly lower tooth loss rates than Muscogee children, indicating a greater amount of dental service in Savannah. There has been some active interest for several years in Savannah in dental health promotion of a type similar to that used in Atlanta. This effort is reflected in the tooth mortality rates.

With the exception of the 14-year age group, the children of the city of Albany experience a favorable tooth loss rate. A rather low caries attack rate and a moderate level of dental care result in the retention of permanent teeth.

Glynn and Camden, adjacent counties in the southeastern corner of the State, are the lowest caries rate areas in the study. The inadequacy of the sample in Camden County permits little reliance on the findings, but this area appears to have the lowest attack rate observed. Glynn County, represented in a group of adequate size, principally urban, has one of the lowest attack rates and the lowest tooth mortality rate in the study.

Residence, continuous or broken in a given place, generally did not influence either the caries attack rates or the tooth mortality rates. Glynn County is the only place where both rates are significantly different in continuous and broken residence children. Children with a continuous residence history have a lower caries attack rate and a lower tooth mortality rate.

The economic level of the populations was another factor considered in relation to the basic rates when adequate data were available. Klein's (12) studies have shown that caries experience is not dependent upon economic status, that the volume of dental care in the form of fillings increases with the increase in community economic level, and that tooth loss rates decrease as the economic level rises. Caries attack rates and tooth mortality rates for Atlanta, Fulton County, and Savannah, by high, low, and middle economic levels, are compared in figure 4. The 7-, 9-, and 11- age specific rates adhere closely to the respective trend lines of caries experience. The decrease in the sample by division into economic groups results in some greater variation based on chance alone. In addition, the comparatively small numbers of children in the 14- and 16- year age groups, which are in a magnitude of caries experience sufficient to result in a high proportion of children with caries, when further divided into individual economic groups, operate to produce rates subject to wide chance variation. Their spread about the trend lines supports this contention. In the 7-, 9-, and 11-age groups no significant difference is observed in caries experience among the economic levels. Therefore, it appears that economic level, by itself, is not a factor in the caries experience of these groups.



Tooth mortality observations for the high economic level are not markedly different in Atlanta and Fulton County. The caries attack rate is greater in Atlanta than in Fulton County. It may be assumed that Atlanta children receive more dental care than do Fulton County children. Children of the same economic level in Savannah experience a somewhat lower tooth mortality rate, except at 16 years. The small difference, in the light of their lower caries attack rate, permits the inference that the quantity of care received is relatively less than that of either Atlanta or Fulton County children. The low economic groups in the respective places have the highest total tooth mortality rates. Atlanta does not retain, in its low economic level, the highly favored position which it occupies for the middle economic level. Atlanta's comparatively low ratio of teeth indicated for extraction to total tooth mortality, however, indicates that at least extraction service has been provided. The Fulton County findings at ages 11, 14, and 16 indicate that much less dental care had been received in earlier years by Fulton County children than by Atlanta children. In Savannah the lower teeth mortality rate reflects the lower caries attack rate. In general the proportion of children in Savannah with teeth indicated for extraction is greater than in Atlanta or Fulton County.

The rural group in Fulton County, while not falling into any one economic level nor permitting such assignment, reflects the most inadequate care, with tooth loss rates higher than for any economic level and with a high ratio of teeth indicated for loss to total mortality.

The tooth mortality rates in the middle economic levels show Atlanta highly favored, with the difference between the high and middle levels almost negligible. Apparently the promotion of dental health in Atlanta schools is the principal factor serving to produce this result. The difference in tooth loss rates between the high and middle economic levels in Fulton County is quite large. Savannah, with a lower caries attack rate than Atlanta, not only is similar in tooth mortality but the proportion which teeth indicated for extraction contribute to total tooth mortality is much greater in this middle economic level.

#### SUMMARY

A study of about 25,000 children in several Georgia communities is presented to gain an understanding of the prevalence of caries in permanent teeth and of the resultant tooth mortality. Basic factors of age, residence, and economic level are considered as to their bearing on these rates. A brief discussion of the possible effects of these variables on the rates is presented. In general, the findings lead to the following conclusions:

1. The prevalence of dental caries in permanent teeth varies in the different places studied.

2. The annual increment of dental caries in permanent teeth also varies from place to place.

3. Evidence has been presented which indicates that no significant variation in caries experience can be attributed to economic status.

4. There is some evidence that the prevalence of dental caries in permanent teeth may be increasing.

5. The tooth mortality rate of a community adheres quite closely to the relative pattern established by the caries attack rate, except in those places where dental health promotion is carried out extensively.

6. Individuals in the high economic strata experience significantly lower tooth mortality rates than those persons in the lower economic levels, except where concerted efforts are made to save teeth by dental care.

#### ACKNOWLEDGMENTS

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place, residence, <sup>2</sup> and age	for	place	es in (	Georg	ia. 1	1946		Bor	nonont	tooth	nor 100
		amine	fth 1 F teet	th 1 F teet	Pern	nanent	teeth	Peri	chi	ldren	per 100
Item	Age	Number ex	Number wi more DMI	Percent win more DMI	Missing	<b>Extraction</b> indicated	Total mor- tality	DMF	Missing	Extraction indicated	Total mor- tality
State total	$ \left\{\begin{array}{c} 7 \\ 9 \\ 11 \\ 14 \\ 16 \\ 7 \end{array}\right. $	5, 115 4, 947 5, 183 5, 218 3, 262	2, 439 3, 616 4, 373 4, 586 2, 970	48 73 84 88 91	41 324 1, 117 2, 427 1, 733	138 658 1, 212 1, 161 587 50	179 982 2, 329 3, 588 2, 320	106 216 308 368 431	0.8 6.5 21.6 46.5 53.1	$\begin{array}{r} 2.7\\ 13.3\\ 23.3\\ 22.3\\ 18.0\\ \end{array}$	3, 5 19, 8 44, 9 68, 8 71, 1
Male	9 11 14 16	2, 592 2, 508 2, 561 2, 489 1, 517	1, 185 1, 799 2, 136 2, 156 1, 364	40 72 83 87 90	20 147 476 1,071 727	59 273 567 584 286	85 420 1, 043 1, 655 1, 013	99 210 300 352 407	1.0 5.9 18.6 43.0 47.9	2.3 10.8 22.1 23.5 18.9	3.3 16.7 40.7 66.5 66.8
Female		2, 523 2, 439 2, 622 2, 729 1, 745	1, 254 1, 817 2, 237 2, 430 1, 606	50 74 85 89 92	15 177 641 1, 356 1, 006	385 645 577 301	94 562 1, 286 1, 933 1, 307	112 223 324 386 459	0.6 7.2 24.4 49.7 57.7	3.1 15.8 24.6 21.1 17.2	3.7 23.0 49.0 70.8 74.9
Albany total	$ \left\{\begin{array}{c} 9 \\ 11 \\ 14 \\ 16 \end{array}\right. $	225 198 195 184 137	69 111 144 153 115	31 56 74 83 84	9 20 61 53	3 20 43 41 9	3 29 63 102 62	133 223 300 308	4.5 10.2 33.2 38.7	1.3 10.1 22.0 22.3 6.6	1.3 14.6 32.2 55.5 45.3
Continuous residence	$ \left\{\begin{array}{c} 9 \\ 11 \\ 14 \\ 16 \end{array}\right. $	119 81 80 82 62	32 50 60 68 50	27 62 75 83 81	0 6 23 15	0 8 12 22 3	0 8 18 45 18	50 158 230 300 279	0 7.5 28.0 24.2	9.9 15.0 26.8 4.8	9.9 22.5 54.8 29.0
Broken residence	7 9 11 14 16	106 117 115 102 75	37 61 84 85 65	35 52 73 83 87	0 9 14 38 38	3 12 31 19 6	3 21 45 57 44	69 119 216 300 352	0 7.7 12.2 37.2 50.7	2.8 10.2 27.0 18.6 8.0	2.8 17.9 39.2 55.8 58.7
Atlanta total	$ \left\{\begin{array}{c} 7 \\ 9 \\ 11 \\ 14 \\ 16 \end{array}\right. $	1, 203 1, 080 1, 182 1, 028 793	865 944 1, 091 969 751	72 87 92 94 95	9 84 218 349 310	15 85 154 102 73	24 169 372 451 383	210 352 459 538 601	0.8 7.8 18.4 33.9 39.1	1.2 7.8 13.0 9.9 9.2	2.0 15.6 31.4 43.8 48.3
Continuous residence	7 9 11 14 16	889 643 611 602 411	642 560 567 575 396	72 87 93 96 96	7 50 104 180 165	9 37 75 52 34	16 87 179 232 199	210 352 493 708 708	0.8 7.7 17.0 29.9 40.1	1.0 5.8 12.3 8.6 8.3	1.8 13.5 29.3 38.5 48.4
Broken residence	7 9 11 14 16	314 437 571 426 382	223 384 524 394 355	71 88 91 92 93	2 34 114 169 145	6 48 79 50 39	8 82 193 219 184	204 368 431 459 493	0.6 7.8 20.0 39.7 38.0	1.9 10.9 13.8 11.7 10.2	2.5 18.7 33.8 51.4 48.2
Camden, <sup>3</sup> total	7 9 11 14 16	65 49 68 53 29	15 19 39 36 17	23 39 57 68 59	0 0 2 14 12	2 3 17 6 5	2 3 19 20 17	42 80 137 187 145	0 0 2.9 26.4 41.4	3.1 6.1 25.0 11.3 17.2	3.1 6.1 27.9 37.7 58.6
Continuous residence	7 9 11 14 16	64 38 41 36 19	15 13 23 22 11	23 34 56 61 58	0 0 2 11 5	2 2 10 4 4	2 2 12 15 9	42 67 133 153 141	0 4.9 30.6 26.3	3.1 5.3 24.4 11.1 21.1	3.1 5.3 29.3 41.7 47.4
Broken residence	7 9 11 14 16	1 11 27 17 10	0 6 16 14 6	0 54 59 82 60	0 0 3 7	0 1 7 2 1	0 1 7 5 8	0 126 145 289 149	0 0 17.6 70.0	0 9.1 25.9 11.8 10.0	0 9.1 25.9 29.4 80.0
Columbus total	7 9 11 14 16	322 386 434 470 324	157 289 371 430 309	49 75 85 92 95	4 42 132 332 263	7 56 110 131 78	11 98 242 463 341	109 230 324 459 601	1.2 10.9 30.4 70.6 81.2	2.2 14.5 25.3 27.9 24.1	3.4 25.4 55.7 98.5 105.3
Continuous residence	7 9 11 14 16	198 258 300 267 179	93 198 264 254 171	47 77 88 95 96	4 27 78 207 165	6 36 87 84 50	10 63 165 291 215	102 244 368 601 708	2.0 10.5 26.0 77.5 92.2	3.0 13.9 29.0 31.5 27.9	5.0 24.4 55.0 109.0 120.1

#### APPENDIX TABLE A.—The total number of children examined, the number and percent with dental caries experience in permanent teeth, the number of permanent teeth missing or indicated for extraction, and the rate per 100 children of permanent teeth DMF<sup>1</sup> and missing, or indicated for extraction from caries experience, by sex, place. residence.<sup>2</sup> and age for places in Georgia. 1946

See footnotes on p.1770.

APPENDIX TABLE A.—The total number of children examined, the number and percent with dental caries experience in permanent teeth, the number of permanent teeth missing or indicated for extraction, and the rate per 100 children of permanent teeth DMF<sup>1</sup> and missing, or indicated for extraction from caries experience, by sex, place, residence,<sup>2</sup> and age for places in Georgia. 1946—Continued

		mined	th 1 or teeth	h 1 or teeth	Pern	nanent	teeth	Pern	nanent chi	teeth Idren	per 100
Item	Age	Number exa	Number wit more DMF	Percent wit more DMF	Missing	Extraction indicated	Total mor- tality	DMF	Missing	Extraction indicated	Total mor- tality
Broken residence	7 9 11 14 16	124 128 134 203 145	64 91 107 176 138	52 71 80 87 95	0 15 54 125 98	1 20 23 47 28	1 35 77 172 126	119 204 269 352 601	0 11.7 40.3 61.6 67.6	0.8 15.6 17.2 23.1 19.3	0.8 27.3 57.5 84.7 86.9
Floyd total	9 11 14 16	206 219 256 410 211	92 147 215 356 193	45 67 84 87 92	18 101 297 174	15 45 93 134 77	16 63 194 431 251	97 182 308 352 459	0.5 8.2 39.4 72.4 82.5	7.3 20.5 36.3 32.7 36.5	7.8 28.7 75.7 105.1 119.0
Continuous residence	9 11 14 16	140 151 184 287 141	64 101 151 250 131	46 67 82 87 93	1 11 79 204 127	10 32 65 81 50	11 43 144 285 177	99 182 289 352 493	0.7 7.3 42.9 71.1 90.1	7.1 21.2 35.3 28.2 35.5	7.8 28.5 78.2 99.3 125.6
Broken residence	9 { 11   14   16	68 72 123 70	28 46 64 106 62	42 67 89 86 87	0 7 22 93 47	5 13 28 53 27	5 20 50 146 74	88 187 386 336 386	10.3 20.6 75.6 67.1	7.6 19.1 38.9 43.1 38.6	7.6 29.4 69.5 118.7 105.7
Fulton total	9 11 14 16	1, 183 1, 083 1, 193 1, 274 884	442 778 1,023 1,164 828	37 72 86 91 94	73 266 590 445	40 151 297 299 154	51 224 563 889 599	210 336 431 538	$ \begin{array}{c} 1.0\\ 6.7\\ 22.3\\ 46.3\\ 50.3\\ 1.9 \end{array} $	3.3 13.9 24.9 23.5 17.4	4.3 20.6 47.2 69.8 67.7
Continuous residence	9 11 14 16	887 772 803 854 545	563 563 706 785 517	38 73 88 92 95	59 182 407 278	39 103 225 223 97	50 162 407 630 375	216 368 459 601	1.2 7.6 22.7 47.6 51.0	4.4 13.3 28.0 26.1 17.8	5.6 20.9 50.7 73.7 68.8
Broken residence	9 11 14 16	290 311 390 420 339	215 317 379 311	30 69 81 90 92	14 84 183 167	48 72 76 57	62 156 259 224	192 279 407 459	4.5 21.5 43.6 49.3	0.3 15.4 18.5 18.1 16.8	0.3 19.9 40.0 61.7 66.1
Glynn total	9 11 14 16	367 363 318 169	123 235 263 230 135	33 64 72 72 80	4 8 56 97 54	2 40 67 67 49	48 123 164 103	167 210 210 269	1.1 2.2 15.4 30.5 32.0	0.5 10.9 18.4 21.1 29.0	13.1 33.8 51.6 61.0
Continuous residence	9 11 14 16	129 141 121 134 85	38 79 72 85 66	29 56 60 63 78	1 9 16 14	9 11 16 17	10 20 32 31	133 149 162 252	0.8 0.7 7.4 11.9 16.5	6.4 9.1 11.9 20.0	0.8 7.1 16.5 23.8 36.5
Broken residence	9 11 14 16	242 226 242 184 84	80 156 191 145 69	35 69 79 79 82	3 7 47 81 40	31 56 51 32	38 103 132 72	192 261 261 289	1. 2 3. 1 19. 4 44. 0 47. 6	0.8 13.7 23.1 27.7 38.1	2.0 16.8 42.5 71.7 85.7
Griffin total	9 11 14 16	125 136 142 112 50	78 123 129 109 45	62 90 91 97 90	12 32 72 14	30 43 45 7	42 75 117 21	407 431 1,064 407	1.0 8.8 22.5 64.3 28.0	4.0 22.0 30.3 40.2 14.0	5. 6 30. 8 52. 8 104. 5 42. 0
Continuous residence	9 11 14 16	93 92 82 33	45 87 83 80 31	94 90 98 94	11 22 60 12	28 17 31 7	39 39 91 19	538 407 1,064 538	11.8 23.9 73.2 36.4	4.2       30.1       18.5       37.8       21.2	41.9 42.4 111.0 57.6
Broken residence	9 11 14 16	43 50 30 17	36 46 29 14	43 84 92 97 83	0 1 10 12 2	0 2 26 14 0	3 36 26 2	308 459 1,064 300	2.3 20.0 40.0 11.8	4.6 52.0 46.7 0	6.9 72.0 86.7 11.8
Muscogee 4 total	7 9 11 14 16	352 390 347 247 0	120 229 260 189 0	34 59 75 76 0	7 34 99 137 0	11 63 105 55 0	18 97 204 192 0	67 145 230 237 0	2.0 8.7 28.5 55.5 0	3.1 16.2 30.3 22.2 0	5.1 24.9 58.8 77.7 0

See footnotes on p. 1770.

# 1769

APPENDIX TABLE A.—The total number of children examined, the number and percent with dental caries experience in permanent teeth, the number of permanent teeth missing or indicated for extraction, and the rate per 100 children of permanent teeth DMF<sup>1</sup> and missing, or indicated for extraction from caries experience, by sex, place, residence,<sup>2</sup> and age for places in Georgia. 1946-Continued

		mined	h 1 or teeth	h 1 or teeth	Pern	nanent	teeth	Perr	nanent chi	teeth Idren	per 100
Item	Age	Number exa	Number wit more DMF	Percent wit more DMF	Missing	Extraction indicated	Total mor- tality	DMF	Missing	Extraction indicated	Total mor- tality
Continuous residence	7 9 11 14 16	183 155 146 111 0	58 94 112 92 0	32 61 77 83 0	6 9 54 64 0	6 37 45 24 0	12 46 99 88 0	62 153 244 300 0	3.3 5.8 37.0 57.7 0	3.3 23.9 30.8 21.6 0	6.6 29.7 67.8 79.3 0
Broken residence	7 9 11 14 16	$     \begin{array}{c}       109 \\       235 \\       201 \\       136 \\       0 \\       187     \end{array} $	62 135 148 97 0	37 57 74 71 0	1 25 45 73 0	5 26 60 31 0	6 51 105 104 0	74 137 223 204 0	0.6 10.6 22.4 53.7 0	3.0 11.1 29.8 22.8 0	3.6 21.7 52.2 76.5 0
North Georgia <sup>5</sup> total	9 11 14 16	187 228 196 239 143 140	79 144 161 205 131	42 63 82 86 92	$ \begin{array}{c c} 1 \\ 10 \\ 50 \\ 139 \\ 132 \\ 1 \end{array} $	10 41 74 79 47	11 51 124 218 179	88 162 289 336 459	0.5 4.4 25.5 58.2 92.3	5.3 18.0 37.8 33.0 32.9	5.8 22.4 63.3 91.2 125.2
Continuous residence	9 11 14 16 7	140 188 154 182 107 47	120 133 156 96	64 86 86 90	1 8 42 117 98 0	10 37 72 69 36	11 45 114 186 134	94 167 336 336 407 72	4.2 27.3 64.3 91.6	19.7 46.8 37.9 33.6	7.8 23.9 74.1 102.2 125.2
Broken residence	9 11 14 16 7	40 42 57 36 717	24 28 49 35 286	60 67 86 97 40	2 8 22 34	4 2 10 11	6 10 32 45 17	149 182 336 1,064 82	5.0 19.0 38.6 94.4	10.0 4.8 17.5 30.6 2.2	15.0 23.8 56.1 125.0 2.3
Savannah total	9 11 14 16 7	633 605 723 440 473	434 481 591 367 196	68 80 82 83 41	19 71 212 197 1	67 108 129 45 8	86 179 341 242 9	187 269 289 300 85	3.0 11.7 29.3 44.8 0.2	10.6 17.8 17.8 10.2 1.7	13.6 29.5 47.1 55.0 1.9
Continuous residence	9 11 14 16 7	382 334 388 279 244	254 269 321 239 90	66 80 83 86 37	15 29 88 115 0	37 39 64 26 8	52 68 152 141 8	176 269 300 336 74	3.9 8.7 22.7 41.2 0	9.7 11.7 16.5 9.3 3.3	13.6 20.4 39.2 50.5 3.3
Broken residence		251 271 335 161 159	180 212 270 128 112	72 78 81 80 70	4 42 124 82 1	30 69 65 19 12	34 111 189 101 13	210 252 279 269 198	1.6 15.5 37.0 50.9 0.6	12.0 25.5 19.4 11.8 7.5	13.6 41.0 56.4 62.7 8.1
Spalding total	9 11 14 16 7	178 202 160 82 105	163 196 154 79 81	92 97 96 96 77	15 70 127 79 1	57 101 73 43 8	72 171 200 122 9	459 1,064 708 708 244 286	8.4 34.6 79.4 96.3 1.0	32.0 50.0 45.6 52.4 7.6	40.4 84.6 125.0 148.7 8.6
Continuous residence	11 14 16 7	94 75 28 54	92 74 28 31	98 98 100 57 96	12 33 68 25 0	30 45 28 14 4 22	47 78 96 39 4	380 1,064 1,064 1,064 137 709	35.1 90.7 89.3 0	32.7 47.9 37.3 50.0 7.4	43.9 83.0 128:0 139.3 7.4
Broken residence	{ 11 14 16	108 85 54	104 80 51	96 94 94	37 59 54	56 45 29	93 104 83	708 538 538	34.2 69.4 100.0	51.0 51.8 52.9 53.7	86.0 122.3 153.7

<sup>1</sup> DMF denotes decayed, missing, or filled permanent teeth. <sup>2</sup> Continuous or broken residence as defined in the text. <sup>3</sup> All ages were examined in Camden County: 6 years, 73; 8 years, 59; 10 years, 59; 12 years, 54; 13 years, 53; 15 years, 53; 17 years 16. <sup>4</sup> No 16-year-olds were examined in Muscogee County schools. <sup>5</sup> North Georgia comprised as a group Rabun, White, Towns, and Lumpkin Counties.

#### APPENDIX TABLE B.—The number of children examined, the number and per cent with dental caries experience in permanent teeth, the number of permanent teeth missing or indicated for extraction, and the rate per 100 children of permanent teeth DMF<sup>1</sup> and missing, or indicated for extraction from caries experience by economic level,<sup>2</sup> residence,<sup>3</sup> and age, for Atlanta,<sup>4</sup> Fulton County, and Savannah, Ga. 1946

		mined	th 1 or teeth	h 1 or teeth	Perm	nanent	teeth	Pern	nanent chil	teeth dren	per 100
Item	Age	Number exa	Number wit more DMF	Percent wit more DMF	Missing	Extraction indicated	Total mor- tality	DMF	Missing	Extraction indicated	Total mor- tality
Atlanta: Continuous residence: High economic level	$ \left\{\begin{array}{c} 7 \\ 9 \\ 11 \\ 14 \\ 16 \end{array}\right. $	308 258 200 223 168	216 211 187 217 162	70 82 94 97 96	0 5 19 62 61	4 11 16 18 4	4 16 35 80 65	198 289 538 1,064 1,064	0 1.9 9.5 27.8 36.3	1.3 4.3 8.0 8.1 2.4	1.3 6.2 17.5 35.9 38.7
Middle economic level	$ \left\{\begin{array}{c} 7 \\ 9 \\ 11 \\ 14 \\ 16 \end{array}\right. $	379 245 243 228 107	294 222 226 215 102	78 91 93 94 95	5 18 31 60 33	4 14 24 14 9	9 32 55 74 42	252 431 493 538 601	1.3 7.3 12.7 26.3 30.8	1.1 5.7 9.9 6.1 8.4	2.4 13.0 22.6 32.4 39.2
Low economic level	9 11 14 16	202 140 168 151 136	132 127 154 143 132	65 91 92 95 97	2 27 54 58 71	1 12 35 20 21	3 39 89 78 92	172 431 459 601 1,064	1.0 19.2 32.1 38.4 52.2	0.5 8.6 20.8 13.2 15.4	1.5 27.8 52.9 51.6 67.6
Broken residence: High economic level	9 11 14 16	67 86 148 170 127	36 72 137 158 120	54 84 93 93 94	0 6 22 77 26	0 4 20 21 4	0 10 42 98 30	126 308 493 493 538	0 7.0 14.9 45.3 20.5	0 4.6 13.5 12.4 3.1	0 11.6 28.4 57.7 23.6
Middle economic level	9 11 14 16 7	134 156 232 144 129 113	145 216 132 118	93 93 92 92 72	12 35 45 46	4 7 22 10 9	6 19 57 55 55	201 493 493 459 459 210	1.5 7.7 15.1 31.3 35.6	3.0 4.5 9.5 6.9 7.0	4.5 12.2 24.6 38.2 42.6
Low economic level	9 11 14 16	195 191 112 126	167 171 104 117	86 90 93 93	16 57 47 73	37 37 19 26	53 94 66 99	336 407 493 493	8.2 29.8 41.9 57.9	19.0 19.4 17.0 20.6	27.2 49.2 58.9 78.5
Fulton County: Continuous residence: High economic level	$ \left\{\begin{array}{c} 7 \\ 9 \\ 11 \\ 14 \\ 16 \\ 7 \end{array}\right. $	237 199 223 207 156 215	62 136 197 192 152 76	26 68 88 93 97 35	0 6 21 62 42 4	4 12 28 20 8 11	4 18 49 82 50 15	48 187 368 493 1,064 69	0 3.0 9.4 29.9 26.9 1.9	1.7 6.0 12.6 9.7 5.1 5.1	1.7 9.0 22.0 39.6 32.0 7.0
Middle economic level	9 11 14 16 7	184 179 268 185 293	132 145 248 174 125	72 81 93 94 43	12 32 155 114 4	19 33 44 46 16	31 65 199 160 20	210 279 493 538 91	6.5 17.9 57.8 61.6 1.4	10.3 18.4 16.4 24.9 5.4	16.8 36.3 74.2 86.5 6.8
Low economic level	9 11 14 16 7	249 257 248 147 142	193 236 232 138 72	78 92 94 94 51	25 89 117 87 3	48 104 98 21 8	73 193 215 108 11	252 459 538 538 115	10.0 34.6 47.2 59.2 2.1	19.3 40.5 39.5 14.3 5.6	29.3 75.1 86.7 73.5 7 7
Rural	9 11 14 16 7	140 144 131 57 114	102 128 113 53 29	73 89 86 93 25	16 40 73 35	24 60 61 22	40 100 134 57	216 386 336 493 46	11.4 27.8 55.7 61.4	17.1 41.6 46.6 38.6	28.5 69.4 102.3 100.0
Broken residence: High economic level	9 11 14 16 7	109 126 130 122 64	66 101 118 116 22	60 80 91 95 34	1 10 39 29	4 7 5 13	5 17 44 42	149 269 431 601 67	0.9 7.9 30.0 23.8	3.7 5.6 3.8 10.6	4.6 13.5 33.8 34.4
Middle economic level	9 11 14 16 7	90 89 124 95 68	61 74 110 89 33	68 83 89 94 48	3 25 45 45	7 8 23 9 0	10 33 68 54	187 300 386 538 106	3.3 28.1 36.3 47.3	7.8 9.0 18.5 9.5	11. 1 37. 1 54. 8 56. 8
Low economic level	9 11 14 16	61 114 108 91	47 98 94 78	77 86 87 86	7 31 54 63	25 45 29 19	32 76 83 82	244 336 352 336	11.5 27.2 50.0 69.2	41.0 39.5 26.8 20.9	52. 5 66. 7 76. 8 90. 1

See footnotes on p. 1772.

# 1771

_		mined	th 1 or teeth	th 1 or teeth	Pern	nanent	teeth	Perm	anent chil	teeth p dren	ay 100
Item	Age	Number exe	Number wi more DMF	Percent wit more DMF	Missing	Extraction indicated	Total mor- tality	DMF	Missing	Extraction indicated	Totalmor- tality
Rural	7 9 11 14 16	50 51 61 58 31	23 41 44 57 28	46 80 72 98 90	0 3 18 45 30	1 12 12 19 16	1 15 30 64 46	99 269 210 1, 064 407	0 5.9 29.5 77.6 96.8	2.0 23.5 19.7 32.7 51.6	2.0 29.4 49.2 110.3 148.4
Savannah: Continuous residence: High economic level	7 9 11 14 16	218 165 156 78 207	60 96 126 70 181	28 58 81 90 87 52	0 4 14 10 55	3 1 12 5 16	3 5 26 15 71	53 141 279 407 352 199	0 2.4 9.0 12.8 26.6	1.4 0.6 7.7 6.4 7.7	1.4 3.0 16.7 19.2 34.3
Middle economic level 5	9 { 11   14   16	104 86 128 0 124	81 69 111 0 66	78 80 87 0 53	6 8 27 0	20 12 29 0 4	26 20 56 0 4	252 269 352 0 122	5.8 9.3 21.1 0	0.0 19.2 14.0 22.6 0 3.2	25.0 23.3 43.7 0 3.2
Low economic level	9 { 11 14 16 7	113 92 132 72 30	77 74 140 58 12	68 80 77 81 40	5 7 51 60	16 15 30 10	21 22 81 70	187 269 244 279 82	4.4 7.6 28.0 83.3	14. 2 16. 3 16. 5 13. 9	18.6 23.9 44.5 97.2
Broken residence: High economic level	9 { 11 14 16 { 7	53 55 38 124 116	34 39 32 100 35	64 71 84 81 30	2 3 9 47 0	4 3 0 11 7	6 6 9 58 7	167 204 308 279 57	3.8 5.4 23.7 37.9 0	7.5 5.4 0 8.9 6.0	11.3 10.8 23.7 46.8 6.0
Middle economic level 5	9 11 14 16 7	100 93 96 0 98	71 76 90 0 43	71 82 94 0 44	1 15 40 0 0	9 25 21 0 1	10 40 61 0 1	204 289 538 0 94	1.0 16.1 41.7 0 0	9.0 26.9 21.9 0 1.0	10.0 43.0 63.6 0 1.0
Low economic level	9 11 14 16	98 123 201 37	75 97 148 28	76 79 74 76	1 24 75 35	17 41 44 8	18 65 119 43	237 261 223 237	1.0 19.5 37.3 94.6	17.3 33.3 21.9 21.6	18.3 52.8 59.2 116.2

APPENDIX TABLE B.— The number of children examined, the number and per cent with dental caries experience in permanent teeth, the number of permanent teeth missing or indicated for extraction, and the rate per 100 children of permanent teeth DMF<sup>1</sup> and missing, or indicated for extraction from caries experience by economic level,<sup>2</sup> residence,<sup>3</sup> and age, for Atlanta,<sup>4</sup> Fulton County, and Savannah, Ga. 1946—Con.

DMF denotes decayed, missing, or filled permanent teeth.
 The economic level assignment is described in the text.
 Continuous or broken residence definitions described in text.
 A tlanta, located in Fulton County, has a city school system separate from the county system.
 Stratification of the 16-year-age group was possible only into high and low economic levels.

# SICKNESS ABSENTEEISM AMONG INDUSTRIAL WORKERS. FIRST AND SECOND QUARTERS OF 1947<sup>1</sup>

# By W. M. GAFAFER, Principal Statistician, United States Public Health Service

The accompanying data on 8-day or longer disabilities experienced by male employees during the first and second quarters of 1947 are derived from periodic reports from industrial sick benefit associations, company relief departments, and group health insurance plans. The reports cover approximately 200,000 males in various industries.

First quarter, 1947.—An inspection of table 1 reveals a decrease of over 10 percent in the frequency of sickness and nonindustrial injuries

TABLE 1.—Average annual number of absences per 1,000 males on account of sick-ABLE 1.—Average annual number of absences per 1,000 mates on account of sick-ness and nonindustrial injuries disabling for 8 consecutive calendar days or longer, by cause; experience of MALE employees in various industries, first and second quarters of 1947 compared with first and second quarters of 1946, and first half of 1947 compared with first halves of years 1942-46, inclusive <sup>1</sup>

	Annual number of absences per 1,000 males											
Cause <sup>2</sup>	Second	quarter	First	quarter		First ha	lf					
	1947	1946	1947	1946	1947	1946	1942-46					
Sickness and nonindustrial injuries Nonindustrial injuries (169–195) Sickness Respiratory diseases	100. 6 10. 3 90. 3 33. 6	100.5 11.8 88.7 27.0	137.9 12.0 125.9 60.9	154.5 12.7 141.8 70.6	119.8 11.2 108.6 47.2	127.1 12.3 114.8 48.5	137.8 12.1 125.7 61.0					
Influenza, grippe (33) Bronchitis, acute and chronic (106) Pneumonia, all forms (107-109) Discourse of phorums and topsile (11th	15.0 4.8 3.0	.0 7.1 4.4 2.9	29.2 8.1 5.8	35.6 8.6 6.7	.0 22.0 6.5 4.4	21.2 6.5 4.8	25.3 9.7 7.9					
115c) Other respiratory diseases (104, 105, 110-	3.6	4.8	5.1	5.0	4.3	4.9	6.6					
114) Digestive diseases Diseases of stomach except caper (117	6.5 15.9	7.2 15.8	12.2 17.4	13.8 17.6	9.4 16.8	10.4 16.7	10.7 17.5					
Diarrhea and enteritis (120) Appendicitis (121) Hernia (122a)	4.9 2.3 3.6 2.0	4.4 1.8 3.6 2.8	5.7 2.4 3.4 2.2	5.2 2.1 3.2 3.4	5.3 2.4 3.5 2.2	4.8 2.0 3.4 3.1	5.6 2.0 4.4 2.3					
Nonrespiratory-nondigestive diseases	3. 1 36. 8	3. 2 42. 7	3.7 43.2	3.7 49.4	3.4 40.4	3.4 46.0	3. 2 42. 9					
Rheumatism, acute and chronic (58, 59). Neurasthenia and the like (part of 84d) Neuralgia, neuritis, sciatica (87b)	2. 2 3. 8 1. 8 2. 5	3. 8 4. 8 2. 3 2. 8	3.1 4.0 1.7 2.8	3.5 5.5 1.9 3.2	2.7 3.9 1.8 2.7	3.6 5.2 2.1 3.0	3.2 5.4 1.8 3.0					
Other diseases of nervous system (80-85, 87, except part of 84d, and 87b) Diseases of heart and arteries, and ne-	1.4	1.8	1.5	2.1	1.5	1.9	1.7					
phritis (90–99, 102, 130–132) Other diseases of genitourinary system	6.6	7.6	7.4	8.5	7.2	8.0	6.8					
(133–138) Diseases of skin (151–153) Diseases of organs of movement except	2.6 3.2	2.7 3.3	3.4 3.2	3.5 3.7	3.0 3.2	3.1 3.5	3.0 3.2					
diseases of joints (156b) All other diseases (45-57, 60-79, 88, 89, 100 101 103 154 155 156a 157 162)	2.8 9.0	2.9 10.7	3.6 12.5	4.0 13.5	3.2 11.2	3.5 12.1	3.6 11.2					
Ill-defined and unknown causes (200)	<b>4</b> .0	3.2	4.4	4.2	4.2	3.6	4.3					
Average number of males	195, 025	198, 565	191, 976	194, 778	193, 501	196, 672	1, 195, 985					

1 Industrial injuries and venereal diseases are not included.

<sup>2</sup> Numbers in parentheses are disease title numbers from International List of Causes of Death, 1939.
 <sup>3</sup> Exclusive of influenza and grippe, respiratory tuberculosis, and venereal diseases.

<sup>1</sup> From Industrial Hygiene Division, Bureau of State Services. Report for year 1946 appeared in PUBLIC HEALTH REPORTS, 62 : 1538-1541 (Oct. 24, 1947).

when the first quarter rate for 1947 (137.9) is compared with the corresponding rate for 1946 (154.5). Notable also is the decrease of 14 percent in the rate for the respiratory group of diseases which dropped from 70.6 in 1946 to 60.9 in 1947, the change reflecting principally the decline in the frequency of influenza and grippe. The digestive diseases while presenting little change as a group showed an increase of over 10 percent for diarrhea and enteritis.

Second quarter, 1947.—Table 1 also carries the frequency rates for the second quarters of 1947 and 1946. There was little change in the frequency for sickness and nonindustrial injuries. There is, however, a 24-percent increase in the respiratory group of diseases showing the effect of the doubling in magnitude of the frequency for influenza and grippe. It will be observed that the number of increases in the frequencies was greater for the second than for the first quarter.

# DEATHS DURING WEEK ENDED NOV. 22, 1947

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

	Week ended Nov. 22, 1947	Correspond- ing week, 1946
Data for 93 large cities of the United States: Total deaths Median for 3 prior years Total deaths, first 47 weeks of year Deaths under 1 year of age. Median for 3 prior years Deaths under 1 year of age, first 47 weeks of year Data from industrial insurance companies: Policies in force Number of death claims Death claims per 1,000 policies in force, annual rate Death claims per 1,000 policies, first 47 weeks of year, annual rate	9, 212 8, 537 430, 544 645 566 34, 529 67, 047, 497 12, 365 9, 6 9, 2	8, 951 423, 510 708 31, 131 67, 316, 985 12, 584 9. 7 9. 4

# **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 NOVEMBER 29, 1947 Summary

The increase during the week in the reported incidence of influenza (2,167 to 2,951) was confined for the most part to Texas, where 1,501 cases occurred (last week 1,007), and where 9,380 of the total of 22,196 cases have been reported since July 26, the approximate average date of seasonal low incidence. For the same period last year the total was 21,289 cases (which was also the 5-year median for the period), of which Texas reported 12,065. Increases of 16 to 38 cases were also reported in Arizona, Alabama, Virginia, Indiana, Tennessee, and Oklahoma, and of 68 (25 to 93) in Arkansas and of 93 (460 to 553) in South Carolina. No other State reported more than 43 cases during the current week.

A total of 141 cases of poliomyelitis was reported for the current week, as compared with 229 last week, 261 for the corresponding week last year, and a 5-year median of 173. Decreases were reported in 5 of the 7 States reporting more than 5 cases. States reporting the largest numbers are Ohio 19, Idaho 15, California 13, and New York, Michigan, and North Carolina 11 each. The total since March 15, the approximate average date of lowest seasonal incidence, is 9,829, as compared with 24,055 for the same period last year and a 5-year median for the period of 12,878.

Currently, 7 cases of Rocky Mountain spotted fever were reported— 5 in North Carolina (last week 4) and 1 each in Missouri and Virginia. One case of smallpox was reported, in New Mexico, and 1 case of psittacosis, in Ohio. Figures for the year to date are above the respective median expectancies for amebic and unspecified dysentery, Rocky Mountain spotted fever, tularemia, undulant fever, and whooping cough.

Deaths recorded for the week in 93 large cities of the United States totaled 8,952, as compared with 9,212 last week, 8,588 and 9,462, respectively, for the corresponding weeks of 1946 and 1945, and a 3-year (1944-46) median of 9,406. The total for the year to date is 439,496, as compared with 432,098 for the same period last year. Infant deaths recorded during the week in the same cities totaled 646, as compared with 641 last week and a 3-year median of 678. The total to date is 35,171, as compared with 31,859 for the same period last year.

# Telegraphic morbidity reports from State health officers for the week ended Nov. 29, 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.

										1		
	D	iphthe	ria	Influenz		28		Measle	s	M me	tis, occus	
Division and State	W end	eek ed—	Me-	W end	eek ed—	Me-	wend	eek ed—	Me-	w end	eek ed—	Me-
	Nov. 29, 1947	Nov, 30, 1946	dian, 1942- 46	Nov. 29. 1947	Nov. 30, 1946	dian, 1942- 46	Nov. 29, 1947	Nov. 30, 1946	dian, 1942- 46	Nov. 29, 1947	Nov. 30, 1946	dian, 1942– 46
NEW ENGLAND Maine New Hampshire Vermont Massachusetts Rhode Island Connecticut	3 0 0 3 0 0	2 0 2 15 1 0	1 0 0 5 0 0	6	1  1 3		42 3 1	155 2 141 141 1 20	14 12 2 141 1 11	0 0 0 2 2	0 0 0 1 0 0	1 0 0 5 1 1
New York New Jersey Pennsylvania	21 6 13	16 6 13	12 5 13	<sup>1</sup> 1 2 (²)	<sup>1</sup> 1 2 2 4	1 4 14 2 4	115 120 61	49 26 207	114 26 242	2 2 4	14 1 3	15 5 11
BAST NORTH CENTRAL Ohio Indiana Illinois Michigan <sup>‡</sup> Wisconsin	19 24 2 4 0	22 10 1 8 0	22 11 7 10 0	5 43 6 3 3	4 9 1 16	10 10 8 1 16	103 31 222 660 74	130 10 11 31 26	22 11 31 56 26	4 1 4 1 1	1 1 4 1 4	3 2 14 4 4
WEST NORTH CENTRAL Minnesota Iowa Missouri North Dakota South Dakota Nebraska Kansas	3 3 13 4 0 1 3	13 3 3 2 0 1 4	13 2 4 2 1 2 5	3 4 1 1	1 1 1	2 5 20 	204 24 55 3 37 9	7 5 4 5 3 10 4	7 10 6 1 7 7 17	0 4 0 0 1 0	2 0 1 0 3 0	2 0 3 0 0 1
SOUTH ATLANTIC Delaware	0 1 10 4 24 19 21 3	3 10 0 17 2 11 15 12 10	1 9 0 17 5 33 15 11 10	3 282 37 553 19 1	3 221  306 40 11	6 2 221 14 322 40 2	2 29 80 4 3 2 5	7 1 67 17 17 27 10 2	2 7 244 5 17 26 9 2	1 0 0 1 3 0 1 0	1 0 1 1 0 0 0 1 1	0 4 2 2 0 1 0 1 1
EAST SOUTH CENTRAL Kentucky Tennessee Alabama Mississippi <sup>3</sup>	19 8 7 5	17 5 6 11	10 11 12 10	4 58 56 2	1 41 31	3 41 58	3 6 12 3	6 3	8 8 5	1 0 3 3	1 1 0 1	2 5 2 1
WEST SOUTH CENTRAL Arkansas Louisiana Oklahoma T'exas	17 6 7 17	8 4 4 22	14 10 10 50	93 1 90 1, 501	34 23 53 1, 316	73 23 54 1, 298	8 2 76	9 1 49	9 3 3 45	1 2 2 3	0 0 0 2	0 1 1 4
MONTAIN Montana Idaho Wyoming Colorado New Mexico Arizona Utab <sup>1</sup> Nevada	8 1 0 8 2 1 8 0	0 2 3 2 8 5 0 0	2 1 0 4 3 4 0 0	7 16 43 3 81	17 6 11 4 115 2	17 2 10 50 4 115 3	82 2 24 12 5 12	30 3 1 6 21 42 9 1	15 8 2 9 4 4 9 1	0 0 2 0 0 0 1	0 1 0 0 0 0 0 0	0 0 1 1 0 0
PACIFIC Washington Oregon California Total 48 weeks	1     3     6     329     11, 220 1	2 1 315 14, 777 1	6 2 33 439 4,312	15 6 2,951 323,709	3 7 2, 320 211, 486	9 24 2, 320 111, 040	33 7 94 2, 277 200, 375	12 11 65 1,405 53,036 5	39 22 101 2, 452 572, 427	0 1 3 56 3, 184	2 0 55 5, 387	2 1 6 105 7, 500
Seasonal low week 4.	(27th)	July 5	-11	(30th) J	uly 26–4	Aug. 1	(35th) A	ug. 30-S	ept. 5	(37th)	Sept. 1	3-19
Total since low	4 923	6 149	6.887	22 196	21. 289	21, 289	14,873	12,951	15.743	543	721	1.005

New York City only.
 Period ended earlier than Saturday.
 Pates between which the approximate low week ends. The specific date will vary from year to year.

	Po	liomye	litis	s	carlet fe	ver	8	mallpo	x	Typl	hoid ar bhoid f	d para- ever
Division and State	W end	eek ed—	Me-	wend	eek led—	Me-	W end	eek ed—	Me-	wend	eek led—	Me-
	Nov. 29, 1947	Nov. 30, 1946	dian 1942- 46	Nov. 29, 1947	Nov. 30. 1946	dian 1942- 46	Nov. 29, 1947	Nov. 30, 1946	dian 1942- 46	Nov. 29, 1947 •	Nov. 30, 1946	dian 1942- 46
NEW ENGLAND												
Maine New Hampshire	. 0			18	48			0				
Vermont	. i	ī	1	10	2	2	Ŏ	ŏ	Ŏ	Ŏ		Ő
Massachusetts		17	5	92	89	166	8	0	0			4
Connecticut	ŏ	ŏ	ĭ	25	15	39	ŏ	ŏ	ŏ	i i	1 2	ő İ
MIDDLE ATLANTIC	1										1	
New York	11	14	14	157	178	251	0	0	0	3		5
New Jersey		4	3	50	24	65 170		0	0	0		
RAST NORTH CENTRAL	·  -	Ű	-	100	101	1.0	ľ	Ŭ	Ŭ	ľ	1	
Ohio	19	10	4	157	238	251	0	1	0	0	3	3
Indiana	1	12	1	59	70	70	0	0	2	2		1
Michigan 8	10	29 14	95	61	116	170	ŏ	U O	1			
Wisconsin	Ō	5	5	43	48	118	ŏ	ŏ	ŏ	ŏ	i õ	Ŏ
WEST NORTH CENTRAL												
Minnesota	3	15	1	52	21	72	0	0	0	0		0
Missouri	ŏ	8	6	29	19	40 53	ŏ	ŏ	ŏ	ŏ	2	1
North Dakota	1	5	0	12	2	7	0	0	0	0	0	Ō
South Dakota		13	1	6 13	233	9 32	0	0	0	2		
Kansas	2	12	2	22	19	64	ŏ	ŏ	ŏ	ŏ	Ö	i
SOUTH ATLANTIC												
Delaware	0	0	0	4	4	.7	0	0	0	0	0	0
District of Columbia		4	0	95	10	51 18	0	ö	0	0		
Virginia	ž	4	ĭ	32	23	56	Ö	ŏ	ŏ	ž	Ğ	3
West Virginia	3	2	0	22	42	77	0	<u>o</u>	0	1	0	
South Carolina	2	ó	ő	6	7	10	ŏ	ŏ	ŏ	ò	1	ŏ
Georgia	1	2	1	18	10	27	0	0	0	4	0	1
Florida	4	0	9	8	13	12	9	9	9	1	1	2
EAST SOUTH CENTRAL Kentucky	2		1	39	38	49	0	0		5	0	0
Tennessee	4	2	í	34	29	53	ŏ	ŏ	ŏ	4	ŏ	3
Alabama	0	3	1	16	7	30	0	0	õ	0	1	1
	'	9	-1	- 1	9	14	۳	4	۳	۳	v	2
Arkansas	0	5	1	5	11	11	o	o	o	0	1	1
Louisiana	Ő	5	2	4	2	14	0	0	Ö	4	1	3
Ukianoma Texas	02	4	7	14	6 35	13 52	0	0		32	0	1
MOUNTAIN	-							1		-	Ň	
Montana	0	1	1	31	7	16	0	0	0	0	0	0
Idabo	15	0	0	9	8	8	0	0	2	0	3	0
Colorado	2	3	3	18	27	27	ŏ	ŏ	ŏ	ŏ	ŏ	4
New Mexico	1	0	0	5	4	10	1	<u>o</u>	0	0	3	1
Utah 3	1	2	2	12	8	27	ő	ŏ	ö	0	0	0
Nevada	î	ō	õ	ĩ	Ō	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ō
PACIFIC												-
washington	3	8	3	50 20	23	36 24	0	0	0	1	0	0
California	13	20	20	85	121	227	ŏ	Ô	ŏ	3	1	4
Total	141	261	173	1, 551	1,730	2,831	1	2	6	53	47	71
48 weeks	10, 441 2	4, 522 1	3, 275	76, 164	104, 724 1	28, 170	156	326	360	3, 671	3, 832	5,175
Seasonal low week 4	(11th)	Mar 1	5-21	(324)	A 110 0	-15	(35th)	Aug.	30-	(11th)	Mar	15-21
	(11011)			1	1			ept. 5	-			
Total since low	9,8292	4,0551	2, 878	14,061	18, 429	28, 180	9	47	53	3, 186	3, 357	4, 359

Telegraphic morbidity reports from State health officers for the week ended Nov. 29, 1947, and comparison with corresponding week of 1946 and 5-year median-Con.

Period ended earlier than Saturday.
Dates between which the approximate low week ends. The specific date will vary from year to year.
Including paratyphoid fever reported separately as follows: Maine 1, Massachusetts 2, Georgia 2, Kentucky 1, Oregon 2.

	Who	oping c	ough			Weel	c ende	l Nov. 29	9, 1947		
	Week	ended—	Me	D	ysente	ry	En-	Rocky		Ту-	Un-
Division and State	Nov. 29, 1947	Nov. 30, 1946	dian 1942- 46	Ame- bic	Bacil- lary	Un- speci- fied	alitis, infec- tious	spot- ted fever	Tula- remia	iever, en- demic	du- lant fever
NEW ENGLAND											
Maine. New Hampshire	22 11 63 209 20	20 7 163 29	67 4 43 163 29		5				  		2
MIDDLE ATLANTIC		10	60								
New York New Jersey Pennsylvania	188 137 113	176 87 181	283 100 181	8	2		1		1	1 	7 1 4
Chio Indiana Illinois Michigan <sup>3</sup> Wisconsin	286 69 96 188 149	95 12 82 157 216	96 17 103 142 117	1  1 	5 1 		1		2 1 1		4 13 7 7
WEST NORTH CENTRAL Minnesota	67 15 37 17 3 14	5 18 10 	31 18 12 4 6	1	1	  1 2		]	 1 		2 14 3 3
Kansas	13	5	28					••••••			
SOUTH ATLANTIC Delaware	3 51 10 66 22 106 76 14	7 31 45 7 20 12 20	3 35 4 45 19 80 42 16		  1 2	1 38 		 1 5	 1  3	 3  1 2 3	 3 
F JOFIG8	22	38	11							1	1
Kentucky Tennessee Alabama Mississippi *	36 52 39	30 14 7	30 30 31	1					2 1 	 1 	1
WEST SOUTH CENTRAL Arkansas. Louisiana Oklahoma. Texas.	42 17 9 309	12 1 6 137	12 1 5 156	11 4 	7  668	 2 229	i 		  2	1 1 8	1 2 7
MOUNTAIN	17	19									
Montana Idaho	17 10 13 39 18 17 5	12 3 5 6 4 17 10	15 5 4 15 5 11 11	5	3	3 24					5
PACIFIC											
Washington Oregon California Total	35 14 62 2,917	10 12 40 1, 818	26 12 120 2,476	$     \frac{1}{1}     \frac{3}{71}   $	4 4 699	1 	 1 	  7	  16		$\frac{1}{\frac{3}{100}}$
Same week, 1946 Median, 1942–46 48 weeks: 1947 1946 Median, 1942–46	1, 818 2, 476 144, 138 91, 503 116, 257			24 25 2, 769 2, 255 1, 805	423 457 15, 303 15, 392 16, 377	90 101 9, 191 6, 021 7, 186	5 9 603 588 597	2 0 555 566 453	35 30 1, 272 896 735	50 80 1, 838 3, 215 4, 187	109 6 99 5, 695 4, 933 6 4,767

Telegraphic morbidity reports from State health officers for the week ended Nov. 29, 1947, and comparison with corresponding week of 1946 and 5-year median-Con.

<sup>3</sup> Period ended earlier than Saturday. <sup>6</sup> 2-year average, 1945-46.

Leprosy: New York, 2 cases. *Psittacosis*: Ohio, 1 case. Alaska, week ended Nov. 29, 1947: Mumps, 1. Territory of Hawaii, week ended Nov. 29, 1947: Measles 2, scarlet fever 1, endemic typhus fever 3, whoop-ing cough 19.

# **WEEKLY REPORTS FROM CITIES \***

# City reports for week ended Nov. 22, 1947

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.

	S ± S Influenza		ienza	S	me- cus,	nia	litis	ver	ses	and	hguo	
Division, State, and City	heria	ohalitis ous, co		s	les case	ngitis, gococ	u m o leaths	o m y e cases	let fe cases	pox ca	atyp r cases	ping c cases
	Dipht	Encep	Cases	Death	Measl	Menin n I n case	Pne	Polic	Scar	Small	Typh par feve	W hoo
NEW ENGLAND												
Maine:												
Portland New Hampshire:	0	0		0		0	2	0	2	0	0	19
Concord Vermont:	0	0		0	··· <b>··</b> ·	0	1	0	0	0	0	
Barre Massachusetts:	0	0		0		0	0	0	0	0	0	
Boston Fall River	3	0		0	29	0	5 1	$\frac{2}{0}$	21 0	0		18
Springfield	Ŏ	Ŏ		Ö		Ŏ	0	Ö	i	Ö	Ö	iõ
Rhode Island:	0	0		0		Ň	,	0				
Connecticut:	0	0				0	1			0		
Hartford	0	0		0		Ö	0	0 0	ő	0	0	7
	0	0		0	1	0	0	0	'	0	0	24
New York:												
Buffalo New York	2 16	0	7	0	72	0 6	1 61	$\frac{1}{3}$	6 44	0 0	$0 \\ 2$	13 56
Rochester New Jersey:	0	0		0	1	0	1	7	10	0	0	15
Camden	8	0	·i-	0	3	0	1	0	4	0	0	4
Trenton	ŏ	ŏ		ŏ		ŏ	i	ŏ	i	ŏ	ŏ	
Philadelphia	4	0	3	1	7	2	15	0	15	0	1	46
Reading	0	ő	z	0	1	ŏ	4	0	2	0	0	12
EAST NORTH CENTRAL												
Cincinnati	1	0		1	2	0	1	2	7	0	0	9
Cleveland	13	0	4	0		2 0	4	7	12 9	0	0	51 20
Indiana: Fort Wayne	0	0		0		0	3	0	1	0	0	2
Indianapolis South Bend	4	Ő		1	2	0	Ĩ	0	9	0	0	7
Terre Haute	ŏ	ŏ		ŏ.		ŏ	2	ŏ	ö	ŏ	ö	
Chicago	2	0		0	70	5	20	6	19	0	0	21
Flint	0	0		0		0	7	1	5	0	0	
Wisconsin:					20					Ŭ	Ů	1.5
Milwaukee	0	0		0.	3	i	3	1	8	0	ő	10
Racine	0	0.		0	2	0	$\begin{bmatrix} 1\\0 \end{bmatrix}$	0	5 0	0	0	11
WEST NORTH CENTRAL												
Minnesota: Duluth	0	0		0	1	0	,	0	ö	0	0	18
Minneapolis St. Paul	0			0	187	0	2	0	26	0	0	19 44
Missouri: Kansas City	2	0	7	1		n	6	"		. I		
St. Joseph	õ	ŏ.		ō.	;	ŏ	0	- i	ŏ	- ŏ	Ĭ.	
	÷ 1	0 1-	)	• •								• •

\*In some instances the figures include nonresident cases.

City reports for	week ended	Nov. 22,	1947—Continued
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· · · · · · · · · · · · · · · · · · ·												
	cases	s, in-	Influ	ienza	es .	me- cus,	nia	litis	ever	ses	and hoid	ough
Division, State, and City	heria	haliti ous, ce		s	es cas	gitis,	u m o eaths	m y e cases	let fe	DOX CB	boid atyp	oing c
	Jipht	Encep	Cases	Death	Measl	Menin n in g cases	P n e l	Polio	scar]	mall	Typ  par	V hool
WEST NORTH CENTRAL-		<u> </u>						<u> </u>				
continued												
Omaha	0	0		0	1	0	3	1	2	0	0	
Wichita	0	0	1	0		0	4	0	2	0	0	3
SOUTH ATLANTIC												
Wilmington	0	0		0	··· <b>··</b>	0	0	1	1	0	0	
Baltimore <sup>2</sup>	2	0	1	1	1	0	10	0	7	0	0	47
Frederick	ŏ	ŏ		ŏ		ŏ	ŏ	ŏ	Ō	ŏ	ŏ	
Washington	2	0		0	5	1	4	0	6	0	1	14
Lynchburg	0	0		0		0	1	0	3	0	0	1
Roanoke	Û	Ö		ŏ		ŏ	Ŭ	ŏ	ō	Ŭ	ŏ	
Charleston	0	0		Ő	1	0	3	0	1	0	0	
North Carolina:	0	0		0		0	0	0	0	0	0	
Wilmington	2	0		0		0	3	0	1	0	0	ĩ
South Carolina:	0	U				0		1	0	0		
Georgia:	0	0	48	1	1	0		0	2	0	0	5
A tlanta Brunswick	1	0	4	0	1	0	3 0	0	3	0 0	0	
Savannah Florida:	0	0		0		0	0	0	0	0	0	1
Tampa	5	0	1	1		0	3	0	0	0	0	3
Tennessee:												
Memphis Nashville	1	0		1	12	0	72	0	$\begin{bmatrix} 0\\1 \end{bmatrix}$	0	1	6 2
Alabama: Birmingham	0	0		0		0	4	0	2	0	0	
Mobile	0	0	2	0		0	2	0	0	0	e	
WEST SOUTH CENTRAL												
Little Rock	0	0	2	0		0	0	0	0	0	0	
New Orleans	0	1	1	1		3	52	2	1	0		
Oklahoma:	0	0		0			3	ő	ň			
Texas:	1	0		0	1		2		3	0	, i	,
Galveston	Ó	Ö		ŏ.		ŏ	1	ŏ	ő	- ŏ	- i	· •
San Antonio	ĭ	ŏ.		ŏ	i	ŏ	ŏ	i	ĩ	ŏ	i	
MOUNTAIN												
Billings	0	0.		0	38	0	0	0	0	0	0	3
Helena	0	0		0		Ő	0	0 0	0 0	0	0	
Idaho:	0	0		0		0		Ű	v l	v	<u> </u>	
Boise Colorado:	U	0		0		U	1	0	0	0	0	
Denver Pueblo	2 0	0		0.	8	0	2 1	0	0	0	0	22 15
Salt Lake City_	0	0 -		0	7	0	1	1	1	0	0	1

<sup>3</sup> Beginning with the current report, deaths reported in Baltimore will include deaths of residents only; prior to this date all deaths occurring in the city have been included.

Division, State, and City	Diphtheria cases	Encephalitis, in- fectious, cases	Influ Gases C	Deaths	Measles cases	Meningitis, me- ningococcus, cases	P n e u m o n i a deaths	Poliomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
PACIFIC												1
Washington: Seattle Spokane Tacoma California: Los Angeles	0 0 0 4	0 0 0		0 0 0 0	1 3 2 4	1 0 0	3 2 0 5	1 0 0 4	7 1 3 11	0 0 0	0 0 0	2 3 
Sacramento	0			0		1	4	0	2	Ô		
Total	74				561	25	262	47	342	0	15	685
Corresponding week, 1946 <sup>1</sup> . A verage 1942-46 <sup>1</sup>	85 82		55 142	12 2 21	326 3 598		245 2 314		487 686	0	16 12	538 623

City reports for week ended Nov. 22, 1947-Continued

<sup>1</sup> Exclusive of Oklahoma City.

<sup>2</sup> 3-year average, 1944-46. <sup>3</sup> 5-year median, 1942-46.

Dysentery, amebic.—Cases: New York 4; Philadelphia 1; Atlanta 1; New Orleans 2; Los Angeles 2. Dysentery, bacillary.—Cases: Providence 1; New York 1; St. Louis 3; Los Angeles 7. Dysentery, unspecified.—Cases: Baltimore 1; San Antonio 2. Typhus fever, endemic.—Cases: Philadelphia 1; Richmond 3; Tampa 1.

Rates (annual basis) per 100,000 population, by geographic groups, for the 86 cities in the preceding table (latest available estimated population, 32,489,000)

	case	in- case	Infi	uenza	rates	me- case	leath	case	case	rates	para- ever	ug h
	Diphtheria rates	Encephalitis, fectious, rates	Case rates	Death rates	Measles case	Meningitis, ningococcus, rates	Pneumonia d rates	Poliomyelitis rates	Scarlet fever rates	Smallpor case	Typhoid and 1 typhoid fe case rates	Whooping of case rates
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	7.8 14.6 8.5 6.2 27.8 5.9 5.1 15.9 6.3	$\begin{array}{c} 0.0\\ 0.9\\ 0.0\\ 2.1\\ 0.0\\ 0.0\\ 2.5\\ 0.0\\ 0.0\\ 0.0\\ \end{array}$	0.0 6.1 3.1 16.5 89.9 11.8 7.6 0.0 4.7	$\begin{array}{c} 0.\ 0\\ 1.\ 4\\ 1.\ 6\\ 2.\ 1\\ 4.\ 9\\ 5.\ 9\\ 2.\ 5\\ 0.\ 0\\ 0.\ 0 \end{array}$	78 40 88 396 20 71 8 421 96	$\begin{array}{c} 0.0\\ 3.8\\ 7.0\\ 2.1\\ 1.6\\ 0.0\\ 7.6\\ 0.0\\ 4.7 \end{array}$	44. 4 40. 0 34. 1 59. 8 50. 7 88. 5 40. 6 39. 7 31. 6	5. 2 5. 7 14. 0 6. 2 3. 3 0. 0 10. 2 7. 9 7. 9	102 45 59 99 47 18 18 18 111 47	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	2.6 1.4 0.0 4.1 1.6 5.9 12.7 0.0 3.2	282 77 115 210 132 47 18 326 41
Total	11.9	0.6	14.2	1.8	90	4.0	42.2	7.6	55	0.0	2.4	110

# FOREIGN REPORTS

# CANADA

Provinces—Communicable diseases—Week ended November 8, 1947.— During the week ended November 8, 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 Bruns- wick	Que- bec	On- tario	Mani- toba	Sas- katch- ewan	Al- berta	British Colum- bia	Total
Chickenpox Diphtheria Dysentery:		12 3	1	96 5	$226 \\ 2$	28	75 1	120 6	67 1	625 19
Amebic Bacillary Encephalitis, infectious				1	1	3	 1		1	3 3 4
German measles Influenza		28		2	9 13	4	2	8	1 3	22 48
Measles Mumps		2 23		211 63	72 222	14 41	32 22	15 40	40 14	386 425
Poliomyelitis Scarlet fever		1	15	82	17 89	9 6	4 5	3 13	5 2	39 213
Tuberculosis (all forms) Typhoid and paratyphoid	<b>-</b>	2	4	64	24	26	15	22	55	212
fever Undulant fever			·····	1	4 2		2	1		4
venereal diseases: Gonorrhea Syphilis	$^{2}_{3}$	7 17	8 5	99 90	$     111 \\     50   $	28 17	39 17	33 7	81 33	408 239
Other forms Whooping cough		2		39	110	32	15	39	3 54	3 291

#### **CUBA**

Habana—Communicable diseases—5 weeks ended November 1, 1947.— During the 5 weeks ended November 1, 1947, certain communicable diseases were reported in Habana, Cuba, as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Chickenpox Diphtheria Leprosy	1 21 4		Malaria. Tuberculosis. Typhoid fever	4 9 4	4

Provinces—Notifiable diseases—5 weeks ended November 1, 1947.— During the 5 weeks ended November 1, 1947, cases of certain notifiable diseases were reported in the Provinces of Cuba, as follows:

Disease	Pinar del Rio	Habana <sup>1</sup>	Matan- zas	Santa Clara	Cama- guey	Oriente	Total
Cancer	10	12	12	26	4	26	90
Diphtheria	1		3	1	7	6	11 42 10
Malaria Measles	5	4	1	3	5 8	1	19 12
Poliomyelitis Rabies						3	3 1
Scarlet fever Tuberculosis	6	1 21	51	48		2 28	3 168
Typhoid fever Whooping cough	10 1	16	3	13	12	30 2	84 3

<sup>1</sup> Includes the city of Habana.

# JAPAN

Notifiable diseases .-- For the 5 weeks ended November 1, 1947, and for the year to date, certain notifiable diseases have been reported in Japan as follows:

Disease	5 weeks Nov. 1	ended , 1947	Total reported for the year to date		
	Cases	Deaths	Cases	Deaths	
Diphtheria	2, 451	159	24, 032	1,976	
Dysentery, unspecified	3, 705	868	38, 299	7,042	
Encephalitis, Japanese "B"	1 57	36	² 255	130	
Gonorrhea	21, 558		180, 589		
Influenza	231		2, 721		
Malaria	902	1	11, 178	21	
Measles	2, 794		460, 336		
Meningitis, epidemic	169	65	3, 205	1,038	
Paratyphoid fever	482	33	4, 318	242	
Pneumonia	5, 682		3 101, 120		
Scarlet fever	207	5	2, 219	52	
Smallpox	5		387	38	
Syphilis	15,634		123, 470		
Tuberculosis	33, 558		246, 516		
Typhoid fever	1, 811	323	16, 253	1,992	
Typhus fever	12	1	1,018	83	
Whooping cough	5, 507		123, 174		

<sup>1</sup> Suspected.

<sup>2</sup> Suspected:
 <sup>3</sup> For the period Mar. 30 to Nov. 1, 1947.

### NEW ZEALAND

Notifiable diseases.-During the 5 weeks ended November 1, 1947, certain notifiable diseases were reported in New Zealand as follows:

Disease	Cases	Deaths	Disease	Cases	Deaths
Cerebrospinal meningitis Diphtheria Amebic Bacillary Frysipelas Food poisoning Influenza	8 47 3 8 19 7 1	1 1   1	Poliomyelitis Puerperal fever Scarlet fever Tetanus Tuberculosis (all forms) Typhoid fever Undulant fever	2 11 87 2 221 54 8	2  74 1

# NORWAY

Notifiable diseases-August 1947.-During the month of August 1947. cases of certain notifiable diseases were reported in Norway as follows:

Disease	Cases	Disease	Cases
Cerebrospinal meningitis Diphtheria Dysentery, unspecified Encephalitis, epidemic Gastroenteritis	21 78 21 7 422 9, 191 3, 355 1, 228 5, 065 1 3 45	Mumps.         Paratyphoid fever.         Pneumonia (all forms).         Poliomyelitis.         Rheumatic fever.         Scaplet fever.         Syphilis.         Tuberculosis (all forms).         Typhoid fever.         Typhous fever, murine.         Weil's disease.         Whooping cough.	- 287 - 13 - 804 - 197 - 116 - 2,434 - 233 - 97 - 306 - 6 - 1 - 2 - 372

# 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

Egypt.—The following daily reports of cholera in Egypt have been received: November 9, 1947, 230 cases, 117 deaths; November 10, 182 cases, 113 deaths, including 2 cases, 1 death in Alexandria, 2 cases, 1 death in Cairo; November 11, 142 cases, 105 deaths, including 1 case in Cairo; November 12, 125 cases, 82 deaths, including 2 cases in Alexandria, 1 case in Cairo, 1 death in Damietta; November 13, 105 cases, 65 deaths, including 1 case in Alexandria, 2 deaths in Ismailiya; November 14, 86 cases, 60 deaths, including 1 case in Cairo, 1 death in Port Said; November 15, 55 cases, 46 deaths, including 2 cases, 1 death in Alexandria. The total number of reported cases officially reported to date is 21,661, with 10,696 deaths.

Indochina (French)—Cochinchina—Longxuyen.—For the period November 4-12, 1947, 16 cases of cholera with 11 deaths were reported in Longxuyen, Cochinchina, French Indochina.

#### Plague

*Peru.*—During the month of October 1947, 4 cases of plague with 3 deaths were reported in Peru, by Departments as follows: Libertad Department, Province of Trujillo, District of Viru, 1 case, 1 death; Lima Department, Province of Chancay, Huacho, 2 cases, 2 deaths, Province of Canete, Farm S. Hilarion, 1 case.

#### Smallpox

Paraguay.—For the month of October 1947, 334 cases of smallpox were reported in Paraguay.

Portugal—Lisbon.—Smallpox has been reported in Lisbon, Portugal, as follows: Weeks ended—October 25, 1947, 15 cases with 1 death; November 1, 34 cases.

Sudan (Anglo-Egyptian).—For the week ended November 8, 1947, 104 cases of smallpox, with 30 deaths, were reported in Anglo-Egyptian Sudan.

#### Typhus Fever

Rumania.—During the month of August 1947, 1,409 cases of typhus fever were reported in Rumania, including 152 cases in Bucharest; for the week ended September 20, 1947, 967 cases were reported, including 60 cases in Bucharest.