Public Health Reports

Vol. 59 • JANUARY 21, 1944 • No. 3

ILLNESS FROM CANCER IN THE UNITED STATES 1—Con.

By HAROLD F. DORN, Senior Economist, United States Public Health Service

IV. Illness from Cancer of Specific Sites Classed in Broad Groups

VARIATIONS IN THE PRIMARY SITE OF CANCER BETWEEN MALES AND **FEMALES**

In about one-half (48 percent) of the white males and three-fourths (74 percent) of the white females who develop cancer, the growth originates in either the digestive or the genital systems (table 4). Among females the genital system is attacked most frequently while among males the most frequent localization is in the digestive system. In other words, out of every 100 white women who develop cancer, 51 will have cancer of the genital organs and 23 will have cancer of the digestive system. Out of every 100 white men who develop cancer, 36 will have cancer of the digestive system, 17 will have cancer of the skin, and 12 will have cancer of the genital system. Since the relative frequency of the different primary sites depends upon the age composition of the population the above statements should be interpreted as applying to a group of persons with an age composition similar to that of the total urban population in 1940.

TABLE 4.—Primary site of development of cancer among white males and females 1

Primary site *	Male	Female
Respiratory system Urinary system Buccal cavity Skin Digestive tract Genital system All other sites	8 7 10 17 36 12	2 3 2 11 23 51 8
Total	100	100

Percentage distribution of standardized rates for all ages using the total urban population of the United States, 1940, as standard.

The classification of the primary site of cancer follows the International List of Causes of Death.

¹ This is the second of three sections of a paper on illness from cancer in the United States. The first section appeared in the PUBLIC HEALTH REPORTS, 59: 33-48 (Jan. 14, 1944). The remaining section will appear in an early issue. The numbering of tables and figures is consecutive throughout the three sections.

It has been pointed out that the number of new cases of cancer developing each year in the white female population is about 12 percent greater, on a relative basis, than the number of new cases developing in the white male population. As can be seen from figure 5, the

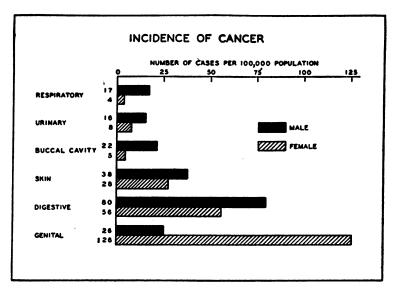


FIGURE 5.—Incidence rates of cancer for the white population by sex and primary site (standardized for age on the total urban population of the United States, 1940).

higher average illness rate among females is due to their greater probability of developing genital cancer, for if cancer of the genital system is excluded, the incidence rate for white males is 60 percent higher than the corresponding rate for white females.

For each of the five other broad groups of primary sites shown in figure 5, the male rate is definitely higher than the female rate. The male rates for cancer of the skin and digestive system are about 40 percent higher than the female rates; for cancer of the urinary system the rate is twice as great, while for cancer of the buccal cavity and respiratory system the rates are four times as great.

In the colored population the male rates are higher for cancer of the buccal cavity, respiratory, digestive, and urinary systems, and lower for cancer of the genital system just as in the white population. But contrary to the situation among white males and females, the rate for cancer of the skin is about the same for both colored females and males (fig. 7).

Incidence rates by age for certain groups of primary sites are shown in figure 6 for white males and females.

67

January 21, 1944

INCIDENCE OF CANCER WHITE POPULATION

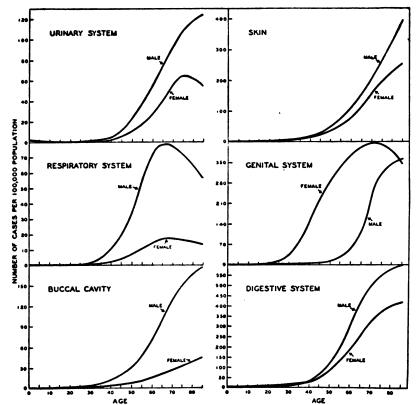


FIGURE 6.—Incidence rates of cancer for certain broad groups of primary sites, by age and sex for the white population.

VARIATIONS IN THE PRIMARY SITE OF CANCER BETWEEN WHITE AND COLORED PERSONS

Dermatologists and clinicians long have believed that light-skinned persons are more likely to develop cancer of the skin than are persons with more pigmentation. The illness rates shown in figure 7 support this belief; the difference between whites and nonwhites, however, is greater for males than for females. For males the prevalence rate for skin cancer among whites is about ten times that among nonwhites but for females the corresponding ratio is about six.

If, as has been suggested, the under-reporting of cancer among Negroes is greater than the under-reporting of cancer among whites, the difference in the prevalence of skin cancer in the two races is not as great as figure 7 indicates. It is not believed, however, that the difference in the relative number of persons with cancer who fail to

obtain medical care is great enough to change materially the general picture presented by figure 7. Moreover the ratio of the white to the colored rate is larger for cancer of the skin than for any other important form of cancer.

Cancer of the genital system is the only form of cancer which is as frequent among colored as among white persons. For each sex the rates are approximately equal. However, the separate genital organs are affected quite differently among females of the two races.

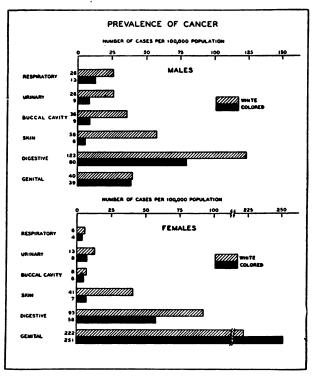


FIGURE 7.—Prevalence rates of cancer for separate primary sites by sex and color of population (standardized for age on the total urban population of the United States, 1940).

The rate for cancer of the uterus is 63 percent higher among colored than among white females. If, as some clinicians believe, cancer of the cervix is more likely to develop when lacerations and tears resulting from childbirth are not properly cared for, the greater prevalence of this form of cancer among Negro females may, in part at least, be due to this cause.

In 1939 the Bureau of the Census reported that about 20 percent of the births to colored mothers in cities of 10,000 or more population in the southern States where the cancer survey was conducted were delivered by midwives compared with about 3 percent of the births to white mothers. About one-half of the Negro and three-fourths of

the white babies were born in hospitals while the remainder were delivered at the mother's home by a physician. In northern cities less than 1 percent of white and colored babies are delivered by midwives. About 80 percent of white births and 64 percent of Negro births occur in hospitals; the remainder are delivered at home by physicians.

These figures suggest that, in the South, Negro mothers receive less adequate medical care at childbirth than do white mothers. It is also likely both in the South and in the North that when delivery occurs at home the mother does not receive as good postpartum medical care as when delivery occurs in a hospital.

Cancer of the genital organs other than uterus is relatively more frequent among white than among colored females. The prevalence rate for cancer of the breast is 50 percent higher and the rate for the other genital sites such as the vagina, vulva, and ovaries is 85 percent higher for white females.

VARIATIONS IN THE PRIMARY SITE OF CANCER BY AGE

Prevalence rates of cancer for broad groups of primary sites are shown in figures 8 and 9 by age for white males and females. The

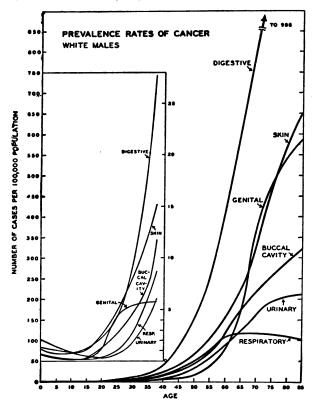


FIGURE 8.—Prevalence rates of cancer for separate primary sites by age for the white male population.

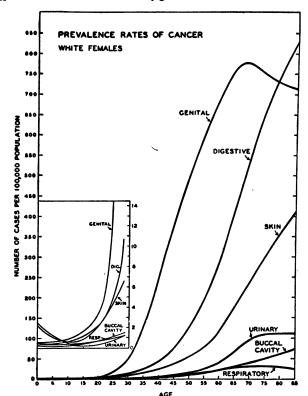


FIGURE 9.—Prevalence rates of cancer for separate primary sites by age for the white female population.

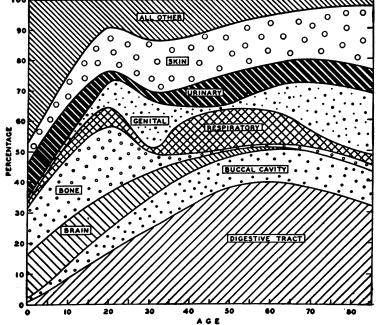


FIGURE 10.—Percentage distribution of the number of cases of cancer of different primary site groups at each age for white males (based on all cases under treatment).

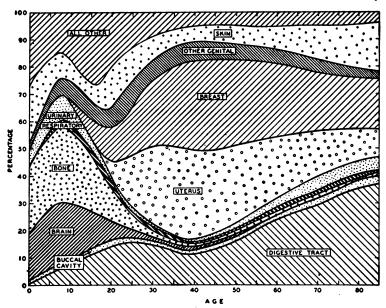


FIGURE 11.—Percentage distribution of the number of cases of cancer of different primary site groups at each age for white females (based on all cases under treatment).

figures emphasize the rapid rise in the prevalence of cancer with increasing age. For certain purposes it is desirable to consider the relative frequency of different primary sites at each age group independently of the frequency at other age groups. For this purpose figures 10 and 11 have been prepared to show the percentage distribution of cases of different primary sites for each age. From these figures it is apparent that cancers of the brain, bone, urinary system, and the "all other" group of sites which includes the glands account for a large proportion of the total number of cases of cancer among children and youth.

V. Illness from Cancer of Individual Specific Sites

THE RELATIVE IMPORTANCE OF CANCER OF INDIVIDUAL SPECIFIC SITES

About one-half (49 percent) of the white women receiving medical care for cancer are being treated for cancer of the breast and uterus; 26 percent are being treated for cancer of the breast and 23 percent for cancer of the uterus including both the cervix and fundus (fig. 12). Next in numerical importance as primary sites are the skin and the digestive tract, intestines, stomach, rectum, and anus.

The primary sites of cancer are more uniformly distributed among the various parts of the body for males than for females. More white males are being treated for cancer of the skin than for any other form of malignant growth, but this accounts for only about 17 percent of all cases of cancer and the rate is only a little more than one-half the rate for cancer of the breast in females (fig. 13). Except for

cancer of the prostate, which ranks next to cancer of the stomach and of the skin in order of frequency, cancer of the genital organs is relatively rare among males.

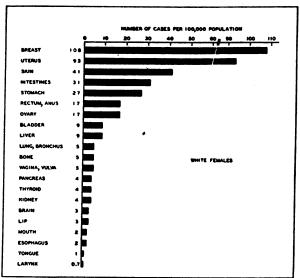


FIGURE 12.—Prevalence rates of cancer of specific primary sites, white female population. (Rates are standardized for age using the total urban population of the United States, 1940, as standard.)

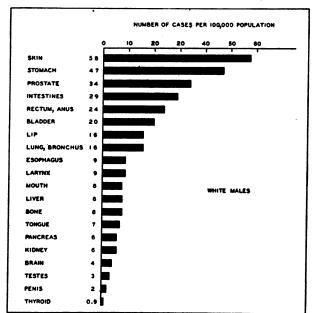


FIGURE 13.—Prevalence rates of cancer of specific primary sites, white male population. (Rates are standardized for age using the total urban population of the United States, 1940, as standard.)

VARIATION IN CANCER OF SPECIFIC FRIMARY SITES BY SEX AND AGE

Although the shape of the illness rate curve by age varies considerably by specific primary site, the male rate is generally higher than the

female rate except for cancer of the liver (fig. 14). As was pointed out above, cancer of the genital organs as a group is much more frequent among females than among males.

For certain sites such as the brain, kidney, lung, and pancreas, the illness rates do not continue to increase with age but reach a peak around 60 to 70 years of age and then decline. In general, the illness rates for males increase more rapidly with increasing age than do the rates for females so that the difference between the rates for the two sexes increases with age. There are, however, a few exceptions to this.

INCIDENCE OF CANCER WHITE POPULATION

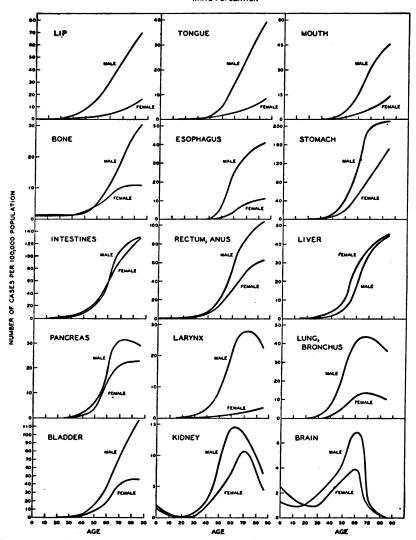


FIGURE 14.—Incidence rates of cancer of specific primary sites by age and sex of the white population.

Appendix—Continued

Table 4.—Incidence rates of cancer per 100,000 white population by sex, age, and primary site, all regions combined

	Un-							75	All	ages	Num-
Site and sex	der 15	15-24	25-34	35-44	45-54	55-64	65-74	and over	Crude	Stand- ardized ¹	ber of cases
Lip: Male	2	1	3	8	19	27	46	69	9	10	53
Female	=		ı	2	3	4	8	16	2	10	9
Tongue: Male Female	-	_	=	_1	4 2	16 3	24 4	39 8	3 1	4 1	20 4
Mouth: Male Female	_	_	_	1 1	6 1	16 5	33 6	45 14	4	5 1	24 7
Esophagus: Male	_	_	_		7	24	35	41	5	5	28
FemaleStomach:	_	_	_	_	1	4	9	11	1	1	6
Male Female Intestines:	-	=	2 1	11 7	43 20	111 56	199 90	210 148	28 15	31 16	1, 590 86
Male Female	=	- ₁	2 4	8 10	22 25	58 58	111 94	131 128	15 17	17 18	886 966
Rectum: Male Female	=	_1	2 3	6 5	22 17	55 31	86 52	104 62	14 9	15 10	781 543
Liver: Male Female	-	_	1	2	5 10	18 28	35 37	44 45	5 7	5 7	263 877
Pancreas: Male	_	_		2	7	18	33	28	4	5	252
FemaleLarynx:	-	-	-	1	3	15	22	22	3	3	183
MaleFemaleLung, bronchus:	=	=	_1	_3	9	22	30	18 4	- 5	- 5	291 22
Male Female	=	=	1 1	7	24 6	42 12	44 14	36 10	10 3	11 3	592 157
Prostate: Male	=	-1	1 4	1 3	9 2	48	200	336	18	22	1,020 12
Penis: Male Uterus: Female Dvary, fallopian tubes:	-	1	18	69	130	3 152	161	17 121	1 52	1 54	2, 9 84
FemaleVagina, vulva: Female	_	_1	_5	13 2	24	32 8	38 16	20 17	11 3	11 3	618 154
Breast: Female	-	1	16	70	126	179	198	185	56	58	8, 237
Male Female	1	=	_1	2 2	8 4	15 7	14 11	7 4	4 2	2	207 121
Male Female	=	=	1 1	4	16 8	38 17	72 42	116 44	10 5	12	603 308
kin: Male Female	1	2 2	7 6	17 18	48 40	114 72	209 152	395 254	34 26	38 28	1, 940 1, 530
Brain: Male	1	1	2	3	4	7	1	_	3	2	153
Female	2	1	1	2	3	4	1	_	2	2	102
Male Female	1	3	1	3	5 4	8	20 11	30 10	3	4 3	232 163

Standardized for age using the total urban population of the United States, 1940.
 A dash indicates a rate of less than 0.1.

Table 5.—Incidence rates of cancer per 100,000 population by age, sex, color, and region

			W		Colored								
Age	South		North		w	est	So	ath	North				
	Male	Female	Male	Female	Male	Female	Male	Fe- male	Male	Fe- male			
Under 10. 10-19. 20-24. 25-29. 30-34. 35-39. 40-44. 45-49. 50-54. 55-59. 60-64. 65-69. 70-74. 75 and over. All ages: Crude.	11. 5 18. 9 23. 5 61. 8 75. 7 105. 0 187. 2 316. 5 458. 4 898. 9 1, 072. 3 1, 570. 7 1, 570. 7 1, 5919. 0 2, 305. 7	10. 7 14. 3 73. 1 123. 4 247. 8 386. 5 540. 5 619. 7 755. 1 1,098. 9	8. 2 15. 2 21. 4 34. 8 48. 8 117. 6 203. 1 347. 6 520. 4 838. 0	7. 0 14. 1 39. 0 83. 6 158. 8	16. 4 15. 5 35. 5 54. 9 86. 1 121. 9 183. 5 394. 8 646. 1 862. 3 1, 102. 5 1, 533. 2	5. 7 11. 4 28. 5 50. 4 107. 4 151. 6 280. 4 427. 4 560. 9 623. 9 811. 6 985. 4 1, 358. 4 1, 687. 4	4. 5 4. 3 45. 4 8. 4 31. 9 49. 4 63. 0 127. 4 173. 7 347. 1 555. 1 555. 1 525. 9 534. 2	7. 7 16. 3 104. 5 155. 0 219. 1	5. 0 5. 2 25. 5 11. 4 33. 8 58. 9 82. 2 113. 5 218. 8 353. 0 556. 2 95. 2 1, 005. 3 844. 0	3. 3 3. 2 30. 2 44. 6 97. 8 170. 9 228. 8 336. 5 469. 7 559. 4 676. 7 642. 2 798. 3 638. 6			
Standardized 1 Number of cases	301. 7 1, 860	313. 6 2, 225	203. 1 7, 588	230. 1 9, 136	232. 8 1, 827	262. 7 2, 192	111.6 194	250. 7 555	141. 1 356	196. 0 597			

¹ Standardized for age using the total urban population of the United States, 1940.

Table 6.—Prevalence rates of cancer per 100,000 population by age, sex, color, and region

			wı		Colored									
Age	South		North		w	est	Sou	1th	North					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female				
Under 10	13. 3 23. 9 31. 1 74. 8 103. 1 151. 9 273. 6 441. 2 594. 6	17. 0 19. 2 94. 0 148. 1 394. 3 579. 7 817. 9 916. 0	13. 3 24. 0 33. 3 51. 4 80. 6 171. 7 311. 6 513. 3	9. 8 18. 5 56. 0 127. 5 253. 4 420. 2 658. 9 826. 2	19. 8 28. 7 42. 0 72. 5 110. 5 181. 0 269. 8 539. 8	13. 6 33. 1 66. 8 150. 7 239. 6 409. 9 706. 5 865. 6	6. 3 54. 7 8. 2 41. 2 67. 2 89. 1 178. 8 226. 0	7. 5 26. 1 146. 7 211. 9 329. 1 470. 8 686. 8 998. 2	10. 0 5. 2 28. 9 20. 2 44. 7 81. 2 128. 6 173. 5 325. 2	8. 0 41. 4 68. 0 131. 8 271. 4 445. 1 615. 4 818. 7				
55-59 60-64 65-69 70-74 75 and over All ages: Crude	2, 791. 2 3, 919. 6 346. 2	1, 613. 6 1, 887. 4 2, 149. 0 2, 237. 2 418. 6	1, 312. 6 1, 823. 8 2, 405. 6 2, 801. 1 281. 5	1, 692. 0 1, 859. 4 2, 108. 1 369. 2	1, 713. 5 2, 202. 3 3, 249. 0 381. 6	1, 346. 6 1, 578. 5 2, 062. 4 2, 692. 2 490. 9	454. 5 736. 2 778. 6 831. 2 803. 9	1, 088. 6 1, 269. 8 1, 062. 2 779. 2 901. 6	524. 8 761. 1 1, 300. 7 1, 605. 8 1, 283. 5	1, 036. 3 1, 363. 7 1, 118. 2 1, 283. 5 792. 2				
Standardized 1_ Number of cases	433. 7 2, 649	468. 3 3, 359	327. 1 12, 088	399. 6 15, 783	335. 6 2, 631	413. 6 3, 458	152. 3 262	364. 6 804	205. 8 519	341.3 1,036				

¹ Standardized for age using the total urban population of the United States, 1940.

Table 7.—Incidence rates of cancer per 100,000 white population by age, sex, and groups of primary sites for each region

	Number of cases		255 80	675 137	81 84		364	3, 130 2, 224	623 514		89	27 28			2, 034 400
808	Standard- ized 1		39.8 12.5	8 4 8 4 8	24.8 5.6		59.5 45.6	88.3 57.3	78.7		15.2	17.7	16.5		58.8 44.0
All ages	Crude		33.3	3.2	28. 4.8.		47.6 39.8	72 52.0	90.4 73.0		12.7	16.9 3.5	19.0		47.6 56.8 8.8
•	75 and over		227.7 76.8	176.4	137.4		450.6 281.7	399.4	655.4		8. 4	57.8 12.9	3.21 4.61		163.1 96.6 195.9
	65-74		169.7	116.5	122.7		332.0 251.1	537.0 313.2	489.7		75.8 9.9	77.1	81.4		199.1 168.3 143.9
	56-64		124.1	58.8 10.1	£.8 40		246.0 161.8	283.3	280.8 185.0		68.6 13.2	70.2	64. 2 14. 3		219.1 150.1 108.7
	45-54		స్తి. చి.	21:3 5:2	41.8		62.0 54.6	117.3	798.7		24. 8. 50. 50. 50.	38.1	98.0 6.0		183.9 121.1 127.0
	2		29.9	7.0	17.7		88 7.00	30.2	31.7		9.2 0.2	11.6	8.0 0.0		109.8 83.4 86.9
	25-34		12.5	1.8	, 8,		13.0	9.3	8.4		 	9.0	8.1. 4.6		25.8 25.6 20.7
	15-24		ا بې	0.0	11		1. 2.1.	1.6	9.0		11	0.1	ا 0		0.1.4 0.9
	Under 15		(3)	00.0	6.0		1.1	0.6 0.5	9.0 8.0		11		6.0		111
	Site, region, and sex	BUCCAL CAVITY AND PHARYNX	South: Male Female	North: Male Female	West: Male Female	DIGESTIVE ORGANS AND PERITONEUM	South: Male Female	North: Male Female	west: MaleFemale	RESPIRATORY ORGANS	South: Male Female	North: Male Female	west: Male Female	TERUS	South: Female North: Female West: Female

	336 2, 337 514	157	818 4, 806	1.061		822	025 025 036 036	112 71	710	860 707	98 SS
	88.0 62.1 1.1	27.6	121.5	32.4 129.7		13.8	16.4	14. 8.3	116.4	18.3	34.2
	35.0 17.0	29.5 129.6	19.0	33.6 150.6		9.3	14.4	16.2	92.8 66.5	19.8	55.1 41.0
_	207.6 148.9 309.5	311.8	324.7	511.4		106.3 105.2	121.4	149.3	1,054.0	242.2	553. 2 324. 4
	178.8 196.3 220.6	285. 5 438. 8	199.1	250.1 438.2		59.0 67.7	95.6 53.2	60.0 62.9	658.9 424.4	120.5 94.3	226.7 192.0
	160.3 180.2 187.8	52.6 421.4	50.8 370.6	67.9		51.7	25.7	41.9	357.0 123.4	5.05 50.6	149.0
	110.7 127.7 126.6	11.9	12.4	300.2		23.0 11.8	24.9 12.6	11.23	153.7	27.5	49.2
	86.3 64.7	1.8 185.5	4.4	7.0		& 4 4 &	₹.6.9 80 44	70.49 2170	50.2 60.6	10.1	8.58 8.00
	17.4 16.0 18.3	8.8 47.6	36.9	10.2		9.9. 8.8	1.8	112	20.6	69 69 69 69	90 m
		ල න	3.30	6.2		11	0.1	1.0	94 97	88	400
	1 0.1	11	00 84	11		1.7		1 2.6	1 2 2	0.0 4.0	1:1
BREAST	South: Female North: Female West: Female	South: Male Female	Male Female	west: Male Female	URINARY ORGANS	South: Male Female	Male Female	west: Male Female	SRIN Male Female		west: Male Female.

1 Standardized for age using the total urban population of the United States, 1940.
2 A deah indicates a rate of less than 0.1.
8 Rates for females include breast and uterus.

CULTIVATION OF PASTEURELLA TULARENSIS IN A LIQUID MEDIUM 1

By Edward A. Steinhaus, Associate Bacteriologist, R. R. Parker, Director, and Max T. McKee, Junior Bacteriologist, United States Public Health Service

It has been generally accepted until recently that *Pasteurella tularensis* could not be grown in liquid media. However, cultivation in such media was reported in April 1943 by Tamura and Gibby (1) who used gelatin, casein hydrolysates, or amino acids supplemented with certain accessory factors.

The purpose of the present paper is to report another liquid medium, simple and practical, which the authors have used successfully for the past year for the cultivation of this bacterium. The formula is as follows:

A.	Bacto-heart infusion broth (dehydrated)	32	gm·
	(Infusion made from beef heart, 500 gm.; proteose peptone, 10 gm.;		-
	and sodium chloride, 5 gm. per liter.)		
	Dextrose	10	gm.
	Cystine		
В.	Bacto-hemoglobin		

In preparing this medium a double strength broth is prepared by dissolving the ingredients of A in 500 ml. of distilled water. This is easily accomplished by steaming a few minutes. The pH is adjusted to 7.8 and the solution sterilized at 121° C. for 15 minutes in a 2-liter flask with dispensing unit attached. The final pH is between 7.0 and 7.4.

The hemoglobin (B) is first made into a uniform paste and then dissolved in 500 ml. of distilled water and strained through gauze to remove any large particles. This solution is then sterilized at 121° C. for 15 minutes.

These two sterile preparations (A and B) are cooled to 50° to 60° C., thoroughly mixed, and dispensed into sterile test tubes under strictly aseptic conditions. The dispensing flask should be agitated frequently to keep the hemoglobin suspended.

Care must be taken to have all or most of the cystine go into solution. A medium in which the cystine settles to the bottom of the tubes is not satisfactory.

EXPERIMENTAL

Original inoculations into the liquid medium were made from fresh cultures on cystine heart agar slants. Subsequent transfers to fresh liquid medium were made with a regular bacteriologic loop or a capillary pipette. Controls of cystine heart agar and plain nutrient agar were used with each transfer. After three transfers small amounts of the culture were inoculated into guinea pigs.

Ten strains of *P. tularensis* from the following sources have been cultivated in this medium: Three from water (isolated via guinea pigs), three from human cases, three from ticks (*Dermacentor andersoni*), and one from a muskrat (*Ondrata zibethica*).

¹ Contribution from the Rocky Mountain Laboratory (Hamilton, Mont.) of the Division of Infectious Diseases, National Institute of Health,

79 January 21, 1944

Most of the strains tested grew well in the liquid medium with a light but definite turbidity usually resulting in 48 hours, although with some the turbidity resulting from the initial transfer was delayed 3 or 4 days. When large inocula were used, the broth frequently became turbid within 20 to 24 hours, and a greater final turbidity usually resulted. Transfers to fresh liquid media were usually made 1 or 2 days after turbidity was apparent and successful serial transfers were effected using in some cases as small an inoculum as one loop of turbid culture.

Microscopic examinations of cultures showed cells of typical morphology for *P. tularensis*.

The reaction of guinea pigs inoculated subcutaneously with 0.5 ml. of culture after the third transfer indicated that no decrease in the virulence of the organisms had taken place.

SUMMARY

An easily prepared liquid medium for the serial cultivation of *Pasteurella tularensis* is described. Strains from water, muskrats, ticks, and human beings have been cultivated in this medium.

REFERENCE

Tamura, J. T., and Gibby, I. W.: Cultivation of Bacterium tularense in simplified liquid media. J. Bact., 45: 361-371 (1943).

PREVALENCE OF COMMUNICABLE DISEASES IN THE UNITED STATES

December 5, 1943-January 1, 1944

The accompanying table summarizes the prevalence of nine important communicable diseases, based on weekly telegraphic reports from State health departments. The reports from each State are published in the Public Health Reports under the section "Prevalence of disease." The table gives the number of cases of these diseases for the 4 weeks ended January 1, 1944, the number reported for the corresponding period in 1942, and the median number for the years 1938–42.

DISEASES ABOVE MEDIAN PREVALENCE

Influenza.—The number of reported cases of influenza rose from 10,238 for the 4 weeks ended December 4 to 317,151 for the 4 weeks ended January 1, 1944. The weekly numbers of reported cases increased from 23,746 for the week ended December 11 to 126,481 and 126,610 for the weeks ended January 1 and January 8, respectively. The total number of cases for the current 4-week period compares

January 21, 1944 80

with 10,734 for the corresponding period in 1942 and with a preceding 5-year median of 11,034 cases.

The accompanying table shows by geographic areas the reported cases of influenza for recent weeks in 1943-44 and corresponding weeks in preceding years. The first sign of the current epidemic appeared in Michigan, in the East North Central region, during the week ended November 13 and within the next 3 weeks (ended December 4) it had spread into all sections of the country except the Pacific Coast. During the week ended December 11 the cases increased very rapidly in all regions and by the end of the next week (ended December 18) the Pacific region also reported a very significant increase over the preceding week as well as over 2 preceding years. In all regions except the Mountain and Pacific the cases reported have been higher than in the 3 preceding years: the minor epidemic of 1940-41 began in the Mountain and Pacific regions about the first week of December 1940. During the week ended January 1, 1944, the Middle Atlantic, West North Central, Mountain, and Pacific regions reported fewer cases than were reported during the preceding week and the New England and Middle Atlantic regions reported only slight increases. While the number of reported cases for the week ended January 8, the last available data at this time, was practically the same as in the preceding week, the West South Central region was the only one which increased, the other eight regions all showing decreases over the week ended January 1. Of 45 States reporting for both weeks, 28 States reported fewer cases for the week ended January 8 than for the preceding week. Considering this comparison by geographic sections: of 7 New England and Middle Atlantic States reporting, 6 reported fewer cases for the week ended January 8 than January 1: of 12 East and West North Central States. 8 reported fewer cases for January 8; of 11 South Atlantic and East South Central States, 6 reported fewer cases; of 11 Mountain and Pacific States, 7 reported fewer cases; and of 4 West South Central States, 1 reported fewer cases. Thus the majority of the States have passed the peak of reported cases in every region except the West South Central.

The most reliable index of the extent of the influenza epidemic is mortality, particularly mortality from influenza and pneumonia. However, influenza and pneumonia are about the only causes that give rise to any sudden increase in the death rate from all causes throughout the country; therefore, the excess deaths from all causes over some normal period are a good index of the mortality associated with the epidemic.

The reports of total deaths from 90 large cities which are received telegraphically and published by the Bureau of the Census in the Weekly Mortality Index afford up-to-date data on excess deaths. In table 2 these 90 cities have been classified according to geographic

section and excess rates computed for each region. The rates as here computed represent excesses for current weeks over an average based on corresponding weeks of the 2 preceding years.

It is seen in table 2 that the excess mortality reached a peak in the week ended January 1, 1944, of 6.4 per 1,000 population (annual basis), which is 50 percent above the expected figure of 12.9 per 1,000. The peak in the excess rates ranged from highs of 8.3 per 1,000 in the

Table 1.—Influenza cases reported by geographic regions by weeks in 1943 and 1944 and for the corresponding weeks in preceding years 1

		Week ended ³										
Geographic area and					1943				19)44		
years	Nov.	Nov. 13	Nov. 20	Nov. 27	Dec.	Dec.	Dec. 18	Dec. 25	Jan.	Jan. 8		
46 States, District of												
Columbia, and New	1	1	1	1	ì							
York City: 1943-44	1.429	1, 555	1, 734	2, 465	4, 484	23, 746	82, 951	83, 973	126, 481	126, 610		
1942-43	1, 576	1, 596	1 760	1,854	1,928	2,604	2, 414	2, 290	3, 440	3, 852		
1941-42	1, 553	2, 308	2,372	2, 469	2,478	2,742	2, 995	2, 693	2, 587	3,800		
1940-41 New England:	976	787	1, 180	1, 332	3, 014	9, 663	29, 864	42, 457	45, 475	77, 144		
New England:	3	1	3	32	54	121	344	929	1, 019	560		
1942-43	5	16	4	7	9	3	4	3	1,013	63		
1941-42	1	1		2	3	2	7	1	1	9		
1940-41	1	6	1	4	5	4	13	8	25	149		
Middle Atlantic:	14	7	24	11	36	133	564	889	526	225		
1942-43	22	37	20	25	81	31	23	25	42	51		
1941-42	. 8	6	16	11	19	15	21	20	27	26		
1940-41 East North Central:	14	6	11	4	6	9	23	45	38	97		
1943-44	32	163	36	41	122	930	5, 620	10, 236	11, 132	8, 959		
1942-43	63	50	68	64	50	69	114	55	103	123		
1941-42	45	60	105	65	75	79	71	72	88	148		
1940-41 West North Central:	57	43	67	56	81	133	305	1, 058	358	396		
1943-44	6	8	17	432	431	7, 398	6, 639	14, 087	7, 647	5, 749		
1942-43	8	24	15	8	30	42	51	40	18	125		
1941-42	13	21	36	15	23	35	63	26	33	65		
1940-41 South Atlantic:	8	10	7	17	19	30	76	336	1, 867	2, 771		
1943-44	428	446	507	649	1, 227	4, 035	15, 920	16, 425	35, 971	32, 635		
1942-43	539	637	674	811	559	1,042	798	691	1, 224	1, 561		
1941-42	407	434	534	529	624	727	732	664	515	979		
1940-41 East South Central:	425	259	500	325	453	632	864	779	1, 706	4, 308		
1943-44	96	70	86	111	428	6, 007	35, 425	4, 775	29, 266	28, 945		
1942-43	64	52	88	45	90	123	85	217	237	197		
1941-42	49	60	97	100	142	101	165	98	121	251		
1940-41 West South Central:	22	59	92	76	69	67	195	458	1,710	11, 536		
1943-44	669	705	815	971	1, 546	8, 633	9, 029	15, 652	25, 686	37, 332		
1942-43	657	626	681	631	907	1, 017	995	967	1, 465	1, 419		
1941-42 1940-41	859 327	1, 482 272	1, 350 285	1, 547 210	1,306 416	1, 474 773	1, 661	1, 517	1, 455	1, 906		
Mountain:	321	212	200	210	410	113	1, 763	12, 796	19, 516	44, 982		
1943-44	142	137	224	179	579	1, 393	5, 975	11, 911	7, 774	7, 169		
1942-43	171	102	156	200	201	206	276	245	289	262		
1941-42 1940-41	110 92	123 108	143 67	146 150	193 390	198 780	164 11,600	177 8, 455	269 9, 566	285 7, 581		
Pacific:	92	109	07	100	220	100	11,000	0, 100	9, 500	1, 081		
1943-44	39	18	22	39	61	96	3, 435	9, 069	7, 460	5, 036		
1942-43	47	52	63	63	51	.71	68	47	51	51		
1941-42 1940-41	61 30	121 24	91 150	54 490	93 1, 575	7, 235	111 15, 025	118 18, 522	78 10, 689	131 5, 324		
. 1930 31	30	42	100	78U	1, 0/0	1, 200	10,020	10, 024	10,008	U, 341		

¹ A similar table appeared in the Public Health Reports for Dec. 24, 1943, p. 1893, with data from Sept. 26 to Dec. 11, inclusive.

³ First week of year is the one ended Jan. 4 to 10, inclusive, with corresponding weeks counted from this base.

New York State and Mississippi excluded.

South Atlantic region, 8.1 in the Middle Atlantic, and 7.8 in the New England, to lows of 5.0 in the Mountain, 5.2 in the West North Central, and 5.3 in the East North Central regions. The above peaks all occurred in the week ended January 1; the rate for that week was 3.3 in the Pacific region, which was the last to be affected and which had a

Table 2.—Weekly actual and excess death rates from all causes per 1,000 estimated population in 90 cities in different geographic sections of the United States, Nov. 7, 1943–Jan. 8, 1944 1

				V	Veek end	ed								
Geographic section	1	Novembe	or		Dece	mber		Janu	ary					
	13	20	27	4	11	18	25	1	8					
		Excess	² death r	ate from	all cause	s per 1,00	00 (annus	l basis)						
All cities		+0.4	-0.2	+1.4	+1.7	+3.5	+4.7	+6.4	+4.5					
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	7 +2.8 -1.7	+.5	3 +.1 +.1 8 3 -1.1 +.9 +1.2 -1.3	+1.4 +1.5 +1.1 +1.9 +1.6 +2.2 +1.1 +1.3 +.8	+1.3 +2.3 +1.8 +2.6 +1.3 +1.3 +1.1 +2.3 +.3	+3.0 +4.3 +2.9 +7.2 +3.4 +3.1 +1.5 +5.6 +.9	+5.3 +7.4 +3.0 +4.9 +4.4 +1.7 +2.8 +3.8 +1.9	+7.8 +8.1 +5.3 +5.2 +8.3 +5.8 +5.3 +5.0 +3.3	+7.2 +5.2 +4.1 +2.4 +2.7 +4.2 +3.7 +1.8 +4.5					
		Death rate from all causes per 1,000 (annual basis)												
All cities: 1943-44 1941-42 3	11. 5 11. 6	12. 1 11. 7	11. 7 11. 9	13. 3 11. 9	13. 9 12. 2	15. 5 12. 0	17. 1 12. 4	19. 3 12. 9	17. 9 13. 5					
New England: 1943-44. 1941-42 *	13. 5 12. 6	13. 2 12. 8	12. 7 13. 0	14.3 12.9	14. 3 13. 0	16. 5 13. 5	19. 5 14. 2	22. 7 14. 9	22. 4 15. 2					
Middle Atlantic: 1943-44 1941-42 3	11. 1 11. 4	11. 9 11. 4	11.8 11.7	13. 3 11. 8	14. 4 12. 1	16. 2 11. 9	19. 4 12. 0	20. 6 12. 5	18. 4 13. 2					
East North Central: 1943-44 1941-42 *	10. 3 10. 5	10. 6 10. 6	10. 8 10. 7	11. 8 10. 7	12. 6 10. 8	13. 6 10. 7	14. 0 11. 0	16. 7 11. 4	16. 1 12. 0					
West North Central: 1943-44 1941-42 *	11. 8 11. 8	13. 0 11. 9	11. 4 12. 2	14. 1 12. 2	15. 1 12. 5	19. 2 12. 0	17. 6 12. 7	18. 4 13. 2	16. 4 14. 0					
South Atlantic:	11. 6 12. 3	11. 1 12. 2	12. 1 12. 4	13. 9 12. 3	14. 1 12. 8	16. 2 12. 8	18. 0 13. 6	22. 1 13. 8	17. 0 14. 3					
East South Central: 1943-44 1941-42 *	14. 4 11. 6	12. 7 11. 5	11. 2 12. 3	14. 5 12. 3	14.0 12.7	15. 0 11. 9	14.3 12.6	19. 3 13. 5	19. 1 14. 9					
West South Central: 1943-44 1941-42 3	10. 4 12. 1	12.8 12.0	13. 0 12. 1	13. 1 12. 0	13. 7 12. 6	14.3 12.8	15. 9 13. 1	19. 4 13. 5	17. 4 13. 7					
Mountain: 1943-44 1941-42 3	12.3 11.9	13. 5 12. 0	13. 8 12. 6	14. 9 13. 6	16. 5 14. 2	19. 7 14. 1	17. 6 13. 8	19. 7 14. 7	17. 0 15. 2					
Pacific: 1943-44	13. 8 12. 9	14. 8 13. 3	12. 1 13. 4	14. 4 13. 6	14. 4 14. 1	14. 7 13. 8	16. 0 14. 1	18. 0 14. 7	20. 2 15. 7					

¹ Computed from data in Weekly Mortality Index of the U.S. Bureau of the Census.

Excess over 3-week moving average of average of rates for corresponding weeks of 1941-42 and 1942-43.
 Three-week moving average of average of rates for corresponding weeks of 1941-42 and 1942-43.

83 January 21, 1944

higher excess rate in the week ended January 8, 4.5 per 1,000. In every other region the excess for the week ended January 8 was less than in the preceding week. In the New England cities the rate for the week of January 8 was only slightly below that of January 1, but in every other region the week of January 8 shows a considerable decrease. The South Atlantic cities dropped from an excess of 8.3 to only 2.7 per 1,000.

As compared with preceding epidemics, the present mortality from all causes is slightly greater than that which occurred in the epidemic of 1928-29 in which the peak excess rate in a group of large cities was 5.8 per 1,000 as compared with 6.4 in the present epidemic. Although the 1928-29 epidemic was the largest of the 15 that have occurred since 1920, the mortality of that epidemic and of the present one is far below the 1918 pandemic when there was a peak excess rate from all causes of 52.5 per 1,000 population and in 1920 when there was a peak excess of 16.1 per 1,000, as compared with 6.4 in the present epidemic. The first cases in the present epidemic were reportedly so mild that almost no mortality was expected, but the figures in table 2 indicate that considerable mortality has occurred.

It should be remembered that all of the above figures refer to mortality from all causes. In the 1928-29 epidemic, 37 percent of the excess mortality from all causes was charged primarily to causes other than influenza and pneumonia. Most of these deaths from other causes were from chronic diseases, and their distribution by weeks included a peak which came at the same time as the influenza peak. They appear, therefore, to represent largely mortality that occurred at the particular time of the epidemic and because of influenza and pneumonia, although other important causes may have existed previously and a death may have been assigned as due primarily to that prior cause.

Meningococcus meningitis.—The number of cases of meningococcus meningitis rose from 967 during the 4 weeks ended December 4 to 1,389 cases during the 4 weeks ended January 1, 1944. Compared with preceding years the incidence of this disease continued at a relatively high level, the number of cases for the current period being almost 3 times the number reported for the corresponding period in 1942 and almost 10 times the 1938–42 median.

Each section of the country has contributed to the high incidence of meningococcus meningitis that has prevailed since the latter part of 1942. However, during the current period the largest increases over the 1938-42 median were reported from the Atlantic and Pacific Coast regions and the North Central region. In the New England, Middle Atlantic, and Pacific regions the numbers of cases (116, 401, and 137, respectively) were approximately 13 times the respective medians; in the East North Central region the incidence

(324 cases) was more than 20 times the median, and in the West North Central the number of cases (121) was 11 times the normal seasonal incidence.

After reaching a relatively high peak in 1936, meningitis declined rapidly until the beginning of 1941; since then the disease has been more prevalent. Preliminary figures indicate that there will be approximately 18,000 cases reported for the year 1943, the highest on record for this disease. The rate of increase during the last 4-week period over the preceding 4-week period (44 percent) was considerably larger than the normal seasonal expectancy. However, this rise may be compared with a corresponding increase in 1942 when the present epidemic was in progress; in that year the increase during the last 4-week period over the preceding period was 55 percent. Thus the rise in 1943 is not as sharp as it was a year ago.

Table 3.—Number of reported cases of nine communicable diseases in the United States during the 4-week period December 5, 1943-January 1, 1944, the number for the corresponding period in 1942, and the median number of cases reported for the corresponding period 1938-42

Division	Current period	1942	5-year median	Current period	1942	5-year median	Current period	1942	5-year median	
	1	Diphther	ia	I	nfluenza	1	Measles ²			
United States New England Middle Atlantio East North Central West North Central South Atlantio East South Central West South Central West South Central Mountain Pacific	1, 100 54 127 128 110 177 108 223 47 126	1, 258 18 131 168 88 261 136 272 68 116	1, 830 28 173 260 94 516 212 384 75 115	317, 151 2, 413 2, 112 27, 918 35, 771 72, 351 75, 473 54, 000 27, 053 20, 060	10, 734 21 121 341 151 3, 755 662 4, 444 1, 002 237	11, 034 21 113 337 300 3, 755 803 4, 444 1, 002 418	29, 658 2, 081 5, 849 11, 217 3, 380 3, 805 704 458 1, 300 864	18, 855 3, 661 6, 233 1, 655 1, 100 226 224 234 2, 464 2, 858	18, 196 1, 900 3, 699 1, 655 1, 409 922 324 470 1, 384 2, 795	
	Meningococcus meningitis			Po	liomyeli	tis	Scarlet fever			
United States New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	1, 389 116 401 324- 121 139 63 55 33 137	485 68 109 54 21 97 11 23 31 71	143 9 33 16 11 25 18 13 8	266 16 33 30 17 11 10 32 30 87	214 5 18 18 19 15 10 75 15	251 5 18 23 19 24 13 20 9 24	12, 291 1, 217 2, 252 2, 913 1, 543 1, 125 481 392 853 1, 515	10, 979 1, 390 2, 122 3, 114 1, 190 1, 080 479 315 640 649	11, 821 858 2, 525 3, 722 1, 352 1, 148 730 388 500 650	
	8	mallpox		Typho typ	oid and p hoid fev	para- er	Who	ping cou	igh ³	
United States New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central West South Central Mountain Pacific	32 0 0 6 10 3 3 7 3 0	112 0 34 44 10 4 14 14 2	220 0 0 48 107 3 3 16 9	324 16 32 30 7 39 104 43 14 39	251 16 25 30 27 39 32 48 21 13	426 16 63 65 26 89 32 84 26 20	7, 234 470 1, 320 1, 523 396 1, 544 548 587 302 544	11, 979 1, 826 3, 266 3, 076 559 898 391 740 331 892	13, 465 1, 582 3, 801 3, 510 3, 510 1, 126 391 456 393 892	

Mississippi and New York excluded; New York City included.
 Mississippi excluded.

85 January 21, 1944

Measles.—The number of reported cases (29,658) of measles was about 60 percent above the 1938-42 median incidence for this period. In the East North Central region the number of cases (11,217) was 6.8 times the median; in the South Atlantic section the incidence (3,805 cases) was more than 4 times the median and minor excesses occurred in the North Atlantic, West North Central, and East South Central regions. In the West South Central, Mountain, and Pacific regions the incidence was below normal, the number of cases in the Pacific region being less than 30 percent of the 1938-42 median.

Poliomyelitis.—The number of cases of poliomyelitis dropped from 755 during the preceding 4-week period to 266 during the 4 weeks ended January 1, 1944. For the country as a whole the current incidence was about 25 percent above that of the corresponding period in 1942, but it was only slightly above the 1938—42 median. A comparison of geographic regions shows that the number of cases was above the median in every section except the West North Central, South Atlantic, and East South Central regions. Approximately 12,400 cases of poliomyelitis were reported during the year 1943; this was the highest number of cases reported during any year since 1931 which had a total of approximately 16,000 cases.

Scarlet fever.—The incidence of scarlet fever was slightly above the normal seasonal level, 12,291 cases being reported for the current 4-week period, as compared with the 1938–42 median of 11,821 cases. The Mountain and Pacific regions appeared to be mostly responsible for the current excess; in the former section the number of cases was 1.7 times the median while in the latter region the incidence was 2.3 times the median. Other regions reported only slight increases and four regions reported a decline from the median incidence.

DISEASES BELOW MEDIAN PREVALENCE

Diphtheria.—The incidence of diphtheria reached a new low level for this season of the year. For the 4 weeks ended January 1, 1944, there were 1,100 cases reported, as compared with 1,258 in 1943 and a median of 1,830 cases for the corresponding period in 1938–42. In the New England region the number of cases (54) was 3 times the 1943 figure for this period and almost twice the median, and a few more cases than might normally be expected were reported from the West North Central and Pacific regions; in all other regions the incidence was relatively low. Preliminary reports indicate that the total number of cases reported for the year 1943 may be the lowest on record.

Smallpox.—For the current period there were 32 cases of smallpox reported, as compared with 112, 70, and 220 for the corresponding period in 1942, 1941, and 1940, respectively. The 1938-42 median was 220 cases. Ten of the total cases were reported from the West North Central region and 7 from the West South Central region; the

remaining cases were widely distributed over other regions of the country.

Typhoid and paratyphoid fever.—For the 4 weeks ended January 1 there were 324 cases of these diseases reported. About one-fourth of the total cases were reported from Mercer County, Kentucky (82 cases), during the week ended January 1. Due largely to the high incidence in that State and to a rather large number of cases reported from California (26 cases) during the week ended December 11, the current incidence was 1.3 times the number reported for the corresponding weeks in 1942. The incidence was, however, only about 75 percent of the 1938–42 median.

Whooping cough.—The number of reported cases (7,234) of whooping cough was about 60 percent of the 1942 figure for this period and about 55 percent of the 1938–42 median incidence. Of the nine geographic regions, the South Atlantic, East South Central, and West South Central reported excesses over the median, but in each of the other six regions the incidence was below the normal seasonal expectancy.

MORTALITY, ALL CAUSES

For the four weeks ended January 1, 1944, there were approximately 48,900 deaths from all causes in the group of large cities reporting to the Bureau of the Census, an increase of approximately 48,400 deaths over the preceding 4-week period. Since the rise in mortality which began in the week ended December 5 following a sharp increase in the reported cases of influenza, the weekly number of deaths in large cities for the 5 weeks has exceeded the average for the corresponding week of the 3 preceding years by 9.4, 17.0, 27.5, 44.7, and 50.4 percent, respectively. A further discussion of mortality in large cities is found under the subject of influenza.

DEATHS DURING WEEK ENDED JANUARY 8. 1944

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

	Week ended Jan. 8, 1944	Corresponding week, 1943
Data from 86 large cities of the United States: Total deaths. Average for 3 prior years. Deaths under 1 year of age. Average for 3 prior years. Data from industrial insurance companies: Policies in force. Number of death claims. Death claims per 1,000 policies in force, annual rate.	12, 950 9, 851 673 641 66, 216, 002 13, 706 10. 8	10, 404 719 65, 276, 406 12, 754 10. 2

PREVALENCE 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 JANUARY 15, 1944 Summary

The number of reported cases of influenza declined during the week from 126,610 to 65,649. Decreases were recorded in all geographic areas, although increases were recorded in 5 States, the largest increase being in Louisiana, which State reported 6,430 cases as compared with 4,106 for the preceding week. A decline was also recorded in both the total mortality for 90 large cities and in mortality from influenza and pneumonia combined for 34 scattered cities. Urban mortality was reported for the weeks ended January 8 and 15, respectively, as follows: Total, all causes, in 90 large cities, 13,322 and 11,538; mortality from influenza and pneumonia in 34 scattered cities (including several smaller cities), 973 and 683. For the peak week for mortality, week ended January 1, the number of deaths in the 90 cities was 50.4 percent above the 3-year average. This is the greatest winter excess in total urban mortality since the influenza epidemic of 1928-29. Estimating that the population of this group of cities increased 1 or 2 percent during the past 2 years, it may be assumed that a similar increase could normally have been expected in the death rate.

The incidence of meningococcus meningitis increased for the fourth successive week. A total of 645 cases was reported currently (more than for any week last year and for any prior week of record), as compared with 309 and 251 for the corresponding week in 1943 and 1930, respectively, the largest numbers previously recorded for the corresponding weeks of record.

Of the current total 401 cases, or 62 percent, occurred in 11 States reporting more than 20 cases each, as follows (last week's figures in parentheses): *Increases*—Massachusetts 34 (24), New York 89 (75), New Jersey 32 (31), Michigan 22 (11), Missouri 25 (18), Virginia 21 (20), and California 42 (36); *decreases*—Pennsylvania 41 (48), Ohio 47 (50), Illinois 27 (35), and Tennessee 21 (29). Reports of 10 or more cases each in 13 other States aggregated 185 cases.

For the first 2 weeks of the year, as compared with the same period last year, increased incidence is reported for dysentery, infectious encephalitis, measles, scarlet fever, and typhoid fever, while for diphtheria, poliomyelitis, smallpox, tularemia, endemic typhus fever, and whooping cough the reported incidence is less.

Telegraphic morbidity reports from State health officers for the week ended January 15, 1944, and comparison with corresponding week of 1943 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.

	D	iphthe	ria		nfluen	za		Measle	8		eningi ingoco	
Division and State	Week	ended-	Me-	Week e	nded-	Me-	Week	ended-	Me-	Wee	d-	Me-
	Jan. 15, 1944	Jan. 16, 1943	dian 1939– 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939– 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939- 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939- 43
NEW ENGLAND												
Maine	1 0 0 3 2 5	0	0 0 0 2 1	28 28 13 158		3	110 3 4 358 154 37	173 304	8 14	0 0 34 4	19 0 0 12 20 4	0 0 3 0 1
MIDDLE ATLANTIC												
New York	9 2 10	16 8 19	24 7 19	1 28 85 28	26	24	873 640 776	852 331 1, 841	852 112 1, 463		23 8 16	5 1 4
EAST NORTH CENTRAL												
Ohio	12 14 5 3	15 12 7 7 6	15 14 28 7 1	4, 212 129 67 61 1, 297	14 8 11 5 147	25 21 5	1, 824 189 298 1, 091 947	61 152 176 135 437	61 31 89 384 437	47 14 27 22 12	0 2 3 3 2	1 1 3 1 0
WEST NORTH CENTRAL			l									
Minnesota	2 12 1 3 2 1	4 10 5 0 1 7	4 10 7 0 2 3	3 1, 839 40 301 60 844	10 46 28	18	760 100 43 337 114 6 65	14 44 46 8 162 140 68	177 134 40 11 9 11 141	11 25 1 1 1 1 7	0 0 25 0 1 1 8	0 0 1 0 0
SOUTH ATLANTIC	٦	1	1	011	•	"	~	~	***	1	ျ	U
Delaware Maryland 2 District of Columbia Virginia West Virginia North Carolina South Carolina Georgia Florida	1 6 0 7 5 15 8 9	0 12 1 11 8 11 2 2 4	0 6 3 11 9 22 7 13 4	876 62 7, 721 3, 394 158 5, 498 1, 634 116	22 4 489 14 17 854 157	22 4 489 14 17 854 157 14	13 126 31 277 266 297 112 192 32	2 10 13 79 7 14 5 13	2 12 8 141 54 94 7 26 11	1 11 21 18 13 6 14 10	0 10 4 20 1 3 16 2	0 1 0 3 0 2 1 0 0
EAST SOUTH CENTRAL Kentucky Tennessee Alabama Mississippi 3	8 2 4 3	11 4 8 9	11 6 8 9	1, 927 913 3, 277	15 63 265	21 92 281	18 179 260	197 16 11	26 67 50	18 21 4 8	7 6 8 0	2 3 3 1
WEST SOUTH CENTRAL Arkansas Louisiana Oklahoma Texas	6 5 3 18	11 5 8 35	11 10 13 50	2, 420 6, 430 1, 760 13, 126	158 9 67 1, 582	212 32 149 1, 561	51 24 14 260	57 26 52 63	30 20 52 216	0 17 4 14	4 3 2 5	0 1 0 5
MOUNTAIN Montana. Idaho W yoming Colorado New Mexico Arizona Utah 2 Newada	1 0 0 7 2 0 0	1 0 0 15 0 2 1	1 1 0 14 1 2 0	654 2 2 334 840 20 541 1,477 138	7 1 36 46 4 83 12	17 8 36 68 4 165 12	145 12 21 154 2 39 8	26 81 8 78 1 7 374	26 46 8 78 29 10 27	2 0 0 2 2 2 2 0	0 0 2 2 2 1 2 2	0 0 0 1 0 0
PACIFIC		-							1	7	7	-
Washington	12 0 35	13 2 29	2 1 18	45 584 2, 531	27 68	4 39 160	102 79 258	717 373 212	141 65 326	16 8 42	14 16 30	1 0 1
Total =	250 518	330 702		65,649	4, 330 8, 182	4, 330 1 8, 182 2	1, 703	8, 225	8, 266	645	309 587	103

Telegraphic morbidity reports from State health officers for the week ended January 15, 1944, and comparison with corresponding week of 1943 and 5-year median—Con.

	Po	liom=o	liste.	0.	arlet fo		Ι,	lmalln		Typhoid and para-		
	P0	liomye	11618		ariet i	ever		mallpo	·		hoid fe	
Division and State	Week ended—		Me-	We end	Week ended—			Week ended—			Week ended	
	Jan. 15, 1944	Jan. 16, 1943	dian 1939– 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939- 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939- 43	Jan. 15, 1944	Jan. 16, 1943	dian 1939- 43
MEW ENGLAND Maine	0 0 0 3 0	2 0 0 2 0	0 0 0 0	21 9 3 241 12 57	17 9 8 366 16 74	17 8 6 191 4 72	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 1	0 0 0 0 0	0 0 0 1 0
MIDDLE ATLANTIC New York New Jersey Pennsylvania EAST NORTH CENTRAL	2 2 0	3 0 1	8 0 0	400 106 272	399 103 285	399 173 285	0 0 0	0 0 10	0 0 0	1 0 0	4 1 2	8 1 4
Ohio	1 3 1 0 0	1 0 0 4 0	1 0 1 1 0	246 89 257 111 185	269 83 223 100 336	269 135 340 250 141	, 0 0 0	6 13 1 0 0	1 5 1 1 6	4 5 1 0 0	1 2 0 0 0	4 1 3 1 0
MEST NORTH CENTRAL Minnesota	1 0 1 0 0	0 1 1 0 1 0 3	1 1 0 0 0 0	108 77 76 22 43 33 75	92 63 98 8 23 21 63	92 63 92 15 22 38 93	0 1 1 1 0 0 2	0 2 0 0 0 0	12 4 1 0 1 0	0 0 2 0 0 0	1 2 1 0 0 0	1 1 1 0 0 0
BOUTH ATLANTIC Delaware	0 1 0 0 1 0 0	0 0 0 1 0 1 0	0 0 0 0 0 1 0	1 97 60 53 53 54 17 13	5 66 25 52 28 50 19 27 5	13 66 13 54 61 63 12 27	0 0 0 0 0 0 1	0 1 0 0 0 1	0 0 0 0 0 0 0	0 0 0 1 0 1	0 8 2 1 1 2 0 1	0 1 0 2 1 2 1 4
EAST SOUTH CENTRAL Kentucky Tennessee Alabama Mississippi 3	0 0 0	2 0 1 0	2 0 1 0	70 57 12 7	51 58 15 13	70 58 26 10	1 0 0 0	0 0 2 0	0 0 0	14 2 0 0	1 0 2 0	1 1 1 1
WEST SOUTH CENTRAL Arkansas Louisiana. Oklahoma. Texas. MOUNTAIN	1 1 2 1	1 0 0 9	1 0 0 2	2 6 18 62	10 14 8 59	10 14 35 59	0 0 1 0	0 0 0	1 0 1 0	2 5 1 0	2 3 2 0	2 7 2 4
Montana Idaho Wyoming Colorado New Mexico Arizona Utah † Nevada	0 0 1 1 0 0 0	0 0 0 0 1 1 0	0 0 0 0 0 0	54 28 5 31 8 18 151 0	9 12 58 53 1 9 90	24 12 8 38 7 7 26 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 3 0 1 0	0 0 1 0 0 5 0	0 2 0 0 0 0 0	0 0 0 1 0 1
PACIFIC Washington Oregon California Total	2 4 2 32	1 1 7 46	0 0 4 36	225 63 244 3, 860	30 22 192 3, 637	38 22 161 3, 637	1 0 6 16	0 3 0 39	0 3 0 53	1 1 4 59	0 0 0 41	0 1 2 78
2 weeks	66	80				7, 094	24	81	90	117	94	159

Telegraphic morbidity reports from State health officers for the week ended January 15,

	Wh	miqoo	cough		Week ended Jan. 15, 1944									
Division and State	en	Veek ded-	Me- dian	An-	1	Dysent	ery	En- ceph- alitis,	Lep-	Rocky Mt.	Tula-	Ty- phus		
	Jan 15, 1944		. 1939- 43	1939- thrax 43	Ame bic	Bacil- lary	Un- speci- fled	infec- tious	rosy	spot- ted fever	remia	lever		
NEW ENGLAND							· -							
Maine. New Hampshire Vermont. Massachusetts Rhode Island Connecticut.	- 78	52 256 19	1 40 227 19	0 0 0 0	0 0 0 0 0	0 0 0 2 0	0 0 0 0	0 0 0 1 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0		
MIDDLE ATLANTIC			1			ļ								
New York New Jersey Pennsylvania		473 194 373	194	0 1 0	3 6 0	21 0 0	0	1 1	0	0	0 0 0	0 0 0		
RASI NORTH CENTRAL						١.		١.						
Ohio	89 23 69 42 80	35 177	260 35 177 220 231	0000	0 0 0 2 0	0 0 1 2 0	0 2 0 0	0 0 1 0 0	0000	0 0 0 0	0 3 1 0 0	0 0 0 0		
WEST NORTH CENTRAL	1													
Minnesota	38 22 13 13 0 3 21	66 30 30 21 2 1 48	66 12 22 13 2 2 48	0 0 0 0 0	1 0 0 0 0	0 0 0 0	0 0 1 0 0	000000	000000	0000000	000000	0 0 0 0		
SOUTH ATLANTIC		~	"	ا ا	·	١	ľ	·	ľ	ľ	ı "l	U		
Delaware Maryland ³ District of Columbia Virginia West Virginia North Carolina South Carolina Georgia. Fiorida	0 18 6 48 62 68 64 5	10 95 13 90 31 85 31 31	6 84 13 53 31 197 66 14	000000000	0 0 0 0 0 0	0 0 0 0 0 0 0 3 0	0 0 48 0 0 0	0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0	0 2 0 1 0 0 0	0 0 0 0 0 3 1 16 8		
BAST SOUTH CENTRAL		İ							- 1		ļ			
Kentucky Tennessee Alabama Mississippi	37 9 4	55 82 41	55 32 28	0	0 0 0	0 0 0	3 2 0 0	0 1 0 0	0	0 0 0	0 2 0 0	0 0 10 1		
WEST SOUTH CENTRAL			1				- 1		- 1		- 1			
Arkansas Louisiana Oklahoma Texas	17 2 5 145	22 1 8 227	11 2 6 96	0 0	1 1 0 20	0 2 0 295	0 0 0	0 0 0 1	0	0	1 1 0 0	0 2 0 15		
MOUNTAIN	١.													
Montana Idaho Wyoming Colorado New Mexico Arizona Utah 2 Nevada	6 1 5 23 2 18 8 0	27 2 9 22 7 19 32 0	9 6 8 28 14 24 32 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 1	0 0 0 1 0 0	0 0 0 1 18 0	0 0 0 0 0 1	0 0 0 0 0 0 0	000000000000000000000000000000000000000	0000000	0 0 0 0 0 0		
PACIFIC						j				- 1	İ			
WashingtonOregon	49 16 65	38 6 341	45 24 183	0	0 0 4	0	0	0 0 2	0	0	0	0 0 2		
Total	1,592	4, 254	4, 254	1	40	337	75	12	0	0	13	58		
2 weeks	3, 130	7, 902	7,902	2 1	54 39	633 275	122 75	19 18	0	0	82 54	117 157		

New York City only.
 Period ended earlier than Saturday.
 Exclusive of delayed report (included only in cumulative total) of 96 cases in Wyoming.
 Including paratyphoid fever cases reported separately as follows: Missouri, 1; Florida, 3; Louisiana, 2; California, 2.

WEEKLY REPORTS FROM CITIES

City reports for week ended January 1, 1944

This table lists the reports from 85 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.

	8	se firfeç	Influ	lenza		menin-	aths	2000	Se Georgia		Dere-	4
	Diphtheria cases	Encephalitis, in tious, cases	Cases	Deaths	Measles cases	Meningitis, m goooccus, o	Pneumonia destha	Poliomyelitis	Scarlet fever c	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough
NEW ENGLAND												
Maine: Portland	0	0	1	0	32	0	13	0	2	0	0	1
New Hampshire: Concord	0	0	_	1	0	0	3	0	0	0	0	0
Vermont: Barre	0	0		0	0	0	0	0	0	0		0
Massachmeette:		_		3	26	6	48	0	51	0	1	
BostonFall River Springfield	10	0		0	0	1	4	0	6	0	Ō	8 1 0 0
Worcester	0	0		0 2	23	2 1	34 34	0	35 35	0	0	ŏ
Rhode Island: Providence	0	0	7	3	62	0	19	0	3	0	0	7
Connecticut: Bridgeport	0	0	37	9	1	2	′ 8	0	2	0	0	2
Hartford New Haven	0	0	2 42	1 5	0	0	7 13	0	1	0	0	0
MIDDLE ATLANTIC												
New York: Buffalo	0	0	2	8	1	3	27	0	2	0	0	1
Buffalo New York Rochester Syracuse	5	Ž 0	199	33 1	379 0	32 4	225 11	ĭ	138	ŏ	ĭ	1 27 0
Syracuse	ŏ	ŏ		î	ŏ	4	iö	ŏ	5	ŏ	ŏ	15
New Jersey: Camden	1	0	9	9	0	0	.8	0	2	0	o	0
Camden Newark Trenton	0	0	25 21	0	7	2	15 21	8	5 3	0	1 0	1
Pennsylvania: Philadelphia Reading	0	0	57	39 5	0	14 2	100 6	0	24 2	0	0	10 3
EAST NORTH CENTRAL												
Ohio: Cincinnati	3	0	14	16	4	14	19	0	22	0	0	3
Cincinnati Cleveland Columbus	0	0	86 625	21 13	254 19	9	45 11	0	28 11	0	0	17 9
		0		1	5	o	8	0	5	0	0	0
Fort Wayne	2	ŏ		0	1 0	6	23	ŏ	26	ŏ	ŏ	4
South Bend	ŏ	ŏ		ĭ	ŏ	ŏ	7	ŏ	ő	ŏ	ŏ	2 0
Illinois: Chicago	o l	o l	40	7	7	20	70	1	68	o l	o l	31
Springfield	0	0	8	1	11	0	3	0	3	0	0	0
Detroit Flint Grand Rapids	0	0	34	13 2	14	14	66 16	8	31 2	0	0	13 0
Wisconsin:	0	0		3	82	1	5	0	10	0	0	0
Kenosha	0	0	4	0 4	0 2	0 2	1 15 2	0	0 24	0	0	0 23
Milwaukee	0	0	4	4 0	43	0	2	0	1 0	0	0	8
WEST NORTH CENTRAL	Ĭ	1		Ĭ		1	1	Ĭ				_
Minnesota: Duluth	,	0		3	11	0	5	0	10	0	o	9
Minneapolis St. Paul	1 3 1	ŏ		7 5	23 29	4	15	ŏ	24 19	ŏ	ŏ	0
M 18801171:	0		9	1	29	- I	17	٥		1	ا	1
Kansas City	8	ő	8	8	10	12	41	8	17 16	0	8	5
Omaha	3	0		5	0	0	13	0	6	0	0	0
Kansas: Topeka Wichita	0	0	1	1	1	0	5	0	2	0	0	8
Wichita	1	0 1		0	19	1	1	0	2	0 1	01	0

City reports for week ended January 1, 1944

	Cuy 1		s jor	week	ended	1 .	uary 1		4		T . =	г—
	93 98 80	infec		lenza		menin-	deaths	8968	99 95 95		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	q S
	Diphtheria ca	Encephalitis, in tions, cases	Cases	Deaths	Measles cases	Meningitis, m gococcus, ca	Pneumonis de	Poliomyelitis	Scarlet fever c	Smallpox cases	Typhoid and I	Whooping cough
SOUTH ATLANTIC Delaware:				١.					1	0	١,	
Wilmington	0	0		0	2	0	0	0	1	l	0	0
Baltimore Cumberland	3 0	0	85 16	25 1	40	0	70	0	25 0	0	0	10 0
Frederick	0	0		0	0	0	0	0	0	0	0	0
District of Columbia: Washington Virginia:	1	0	603	7	39	6	32	0	31	0	1	3
Lynchburg Richmond	0	0	49 14	0	91	0	0 15	0	0 2	0	0	9
Woot Virginia	ŏ	ŏ		Ŏ	i	Õ	4	Ŏ	Ō	Ō	Ō,	6
Charleston	0	0	100	8	0	0	0 8	0	2	0	0	0 1
North Carolina: Winston-Salem	0	0	132	3	40	0	2	0	1	0	0	0
South Carolina: Charleston	0	0	472	1	4	0	7	0	4	0	-0	0
Georgia: Atlanta	1	0	704	7	6	2	9	0	8	0	0	0
Brunswick Savannah	0	0	1, 298	0	28 0	0	2 2	0	0 2	0	0	0
Florida: Tampa EAST SOUTH CENTRAL	0	0	200	0	0	1	1	0	0	0	0	0
Tennessee: Memphis Nashville	0	0	37	6 6	0	3	15 10	0	4 2	0	0	1 0
Alabama: Birmingham	0	0	202 88	6	15 0	0	12 5	0	0	0	0	0
Mobile WEST SOUTH CENTRAL Arkansas:												-
Little Rock Louisiana:	0	0	299	1	3	0	2	1	0	0	0	0
New OrleansShreveport	0	0	52	13 2	0	0	18 10	0	7	0	0	0
Texas: Dallas	1	0	17	8	0	0	15 3	0	0	0	1 0	1
Galveston	0 2	0		1 2 10	0 3	1	19 24	1 0	ŏ	ŏ	ŏ	0 1
San Antonio	1	0	18	10	0	0	24	۰	١	١	۰	1
Montana: Billings	2	1	1	1	0	Ó	1	0	o	o l	ŏ	0
Great Falls Helena Missoula	0	0	519	1 0	30 1	0	0	0	2	0	0	0
Idaho:	0	0	300	0	0	0	2	0	1	0	0	0
BoiseColorado:	0	0	139	0	0	1	1	0	2	0	0	0
Denver Pueblo	2	0	25	6	10 92	2 0	15 3	1 0	10 0	0	0	12 1
Utah: Salt Lake City	0	0	1	1	3	0	2	0	26	0	0	0
PACIFIC Washington:	_			_			٠,,	٥	3	0	0	9
Seattle Spokane Tacoma	1 0 1	0	2	5 1 5	8 12 4	2 0 0	15 5 0	0	17 25	0	ŏ	1
California:	3	0	568	12	40	6	15	0	22	0	0	7
Los Angeles Sacramento San Francisco	1 4	0	37 569	2 7	4	ŏ	3 25	0	7 10	ŏ	ŏ	0 2
Total	56		7, 782	399	1, 556	200	1, 352		833	0	6	274
Corresponding week, 1942	65 97	2	180 1, 563	57 1 59	1, 687 21, 560	81	593 485	8	829 986	9	13 14	800 1,042
A verage, 1938-42	81 1		1,000	- 99	-1, 000		700		900	"	1.2	1,014

Dysentery, amebic.—Cases: Boston, 1; New York, 1; St. Louis, 1.

Dysentery, bacillary.—Cases: Worcester, 16; New York, 5; Chicago, 1; Detroit, 2; Charleston, S. C., 6.

Dysentery, unspecified.—Cases: Baltimore, 1; Richmond, 1; San Antonio, 3.

Tularemia.—Cases: New York, 1; Indianapolis, 1.

Typhus fever.—Cases: New York, 1; Savannah, 2; New Orleans, 2; San Antonio, 2.

¹³⁻year average, 1940-42.

^{2 5-}year median.

Rates (annual basis) per 100,000 population, by geographic groups, for the 85 cities in the preceding table (estimated population, 1948, 33,929,400)

	Case Case tes		Influenza		rates	C886	me- s, case death		8	case rates	para-	cough
	Diphtheria rates	Encephalitis, infections, case rates	Case rates	Death rates	Measies case	Meningitis, ningococcus, rates		Poliomyelitis rates	Scarlet fever	Smallpox case	Typhoid and paratyphoid fever case rates	Whooping o
New England Middle Atlantic East North Central West North Central South Atlantic East South Central West South Central Mountain Pacific	27. 3 2. 8 4. 1 18. 3 8. 7 0. 0 11. 7 32. 2 17. 5	2. 5 0. 9 0. 0 0. 0 0. 0 0. 0 8. 0 0. 0	221 148 476 37 6, 374 1, 942 1, 132 7, 919 2, 055	59. 6 48. 2 50. 2 67. 0 93. 7 124. 7 108. 5 80. 4 55. 9	365 184 259 193 448 89 29 1,093	32.3 29.3 39.1 44.6 27.8 23.8 14.7 24.1	380. 1 199. 8 169. 9 215. 1 274. 2 249. 5 266. 9 201. 0 110. 1	0.0 0.5 0.6 0.0 0.0 0.0 5.9 8.0	256 85 136 195 134 36 23 362 147	0. 0 0. 0 0. 0 0. 0 0. 0 0. 0 0. 0	2.5 0.9 0.0 0.0 1.7 0.0 5.9 0.0	52 27 64 43 50 6 6 105
Total	8. 6	0.6	1, 196	61.3	239	30. 7	207. 8	0.8	128	0.0	0.9	42

TERRITORIES AND POSSESSIONS Hawaii Territory

Plague (human).—On December 29, 1943, 1 death from human plague was reported in Kukuihaele, Hamakua District, Island of Hawaii, T. H., bringing the total number of deaths from plague to 7 for the year 1943 to date. The previous deaths occurred on March 5, March 28, April 11, May 3, August 22, and December 19, 1943. The death on December 29 was a 42-year-old male who had lived approximately 9 miles from where the preceding death occurred.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended December 18, 1943.— During the week ended December 18, 1943, 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		·27 12	5	207 43 19	320 1	122 4	92 2	98 2	124	990 69 19
German measles Influenza Measles Meningitis, meningo-	1	36 1		11 155	6 855 222	23 7	1 80 8	62	4	24 994 458
coccus		8	1 1	66 1 58	89 150	89 49	6	10 31	2 13 27	231 2 337
Tuberculosis (all forms) Typhoid and paraty- phoid fever Undulant fever Whooping cough		1	1	121 6	45 1 57	15 19	9		20 1	202 8 1 167

JAMAICA

Notifiable diseases—4 weeks ended December 18, 1943.—During the 4 weeks ended December 18, 1943, cases of certain notifiable diseases were reported in Kingston, Jamaica, and in the island outside of Kingston, as follows:

Disease	Kingston	Other lo- calities	Disease	Kingston	Other lo- calities
Chickenpox Diphtheria Dysentery Erysipelas	2 3 4 1	7 1 3 1	Leprosy Tuberculosis Typhoid fever Typhus fever	11 6 1	1 74 85 1

95 January 21, 1944

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

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

A cumulative table showing the reported prevalence of these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

(Few reports are available from the invaded countries of Europe and other nations in war zones.)

Plague

Belgian Congo—Blukwa Region—Lonito.—During the week ended December 4, 1943, 2 cases of plague with 2 deaths were reported in Lonito, in the Blukwa Region, Belgian Congo.

British East Africa—Kenya.—During the week ended December 11, 1943, 1 case of plague with 1 death was reported in Kenya, British East Africa.

Madagascar.—During the month of November 1943, 2 cases of plague with 2 deaths were reported in Madagascar.

Yellow Fever

Portuguese Guinea.—During the week ended December 18, 1943, yellow fever was reported present in inland towns and other Portuguese West African possessions, and for the week ended December 25, 1943, 3 cases of yellow fever were reported in Portuguese Guinea.

Sierra Leone—Gallinas.—On December 1, 1943, 1 case of suspected yellow fever with 1 death was reported in Gallinas, Sierra Leone.

