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THE DIET IN GERMANY AND THE OCCUPIED COUNTRIES DURING THE SECOND WORLD WAR

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The material presented in this paper was obtained during the writers' stay in Germany prior to and after the outbreak of war between the United States and Germany, that is, between August 1941 and May 1942, and from sources in the United States. Information concerning food rations was obtained from the records of the prisoner-of-war and the commercial sections of the American Embassy in Berlin, the German newspapers, German civilians including physicians, a few citizens of occupied countries, prisoners of war including captive physicians, and from the writers' observations on civilians, prisoners of war, and the diplomatic group interned at Bad Nauheim after December 11, 1941, and from material supplied by the Office of War Information. It is believed that the data are reliable except as noted in the paper. For example, ration changes were published in the German newspapers; it was a simple matter to check the food cards issued to the German civilians to see that they corresponded to the amounts stated in the newspapers.

England and France declared war on Germany on Sunday, September 2, 1939. On Monday, food rationing was begun in Germany. Thus it is evident that all preparations had been made for immediate rationing upon the outbreak of hostilities. The central government of the Third Reich determined the amounts of food allowed; food cards were distributed by the local governments. For the ration period, which was of 4 weeks' duration, each person received an allotted number of coupons, these coupons to be given to the shopkeeper or restaurant as purchases were made.

Even before the outbreak of war, consumption of food by German civilians was restricted. Such products as peanuts and bananas had all but disappeared from the markets and there were shortages of meat, fats, and dairy products. After rationing was put into effect, all foods were restricted. The number of eggs obtainable varied,

only two per person being available in Berlin during the month of November 1941. Twelve was the maximum allowed, but the average, over the ration period up to May 1942, was three eggs per person per month. Since October 1942, the allowance has been two eggs per month.

No ration cards for fish were issued but consumers were required to register with the retail dealers. It is estimated that 93 percent of the North Sea supply had been cut off by the war. The average consumption of fish was 120 to 250 gm. weekly. One hundred and fourteen gm. of polished rice were allowed per week. Coupons were issued for 228 gm. of rolled oats per week, 44 gm. of noodles, macaroni, spaghetti, and corn meal per week, and 114 gm. of dried peas, lentils, dried beans, etc., per week. The amount of these foods that could be obtained was variable. Seldom was a sufficient supply available for even half of the allowed amount. Thirty-one gm. of artificial honey a week could be obtained. Since October 1942, normal consumers have been allowed 150 gm. of "Naehrmittel" (corn meal, noodles, etc.); children under 3 years of age, 275 gm., and children 3 to 6 years of age, 212 gm. Thirty-one gm. of artificial honey and 15 gm. of cocoa powder have been given to children weekly since October.

Except as noted above the German civilians did not have much difficulty in purchasing the amounts called for on their ration cards.

During the summer of 1941, potatoes were not rationed, but during the winter of 1940-41, only 2.5 kg. of potatoes were allowed per person a week. Potatoes were served peeled and boiled with nearly every meal in Germany. On November 18, 1941, an order was issued that potatoes must be served *unpeeled* three times a week in the German restaurants. In the latter part of the potato gathering season in 1941 severe cold weather occurred. Many potatoes and other vegetables probably were frozen, since in the winter of 1941-42 the potatoes had a very disagreeable sweetish taste. Since October 1942, 4.5 kg. of potatoes have been allowed for the normal consumer and 6.0 kg. for miners. The per capita consumption of potatoes before the war is estimated at 3.3 to 3.5 kg. per week.¹

The increase in the potato and bread rations in October 1942 may indicate that the potato and grain crops showed an increase in 1942.

The amounts of other vegetables naturally varied with the season. Cabbage, red and white, and other members of the cabbage family were served very frequently. Sauerkraut was eaten less often than cabbage. Carrots were served often. During the spring and early summer of 1941, 2 kg. of tomatoes per week were allowed, and smaller amounts of lettuce, cauliflower, spinach, and turnips.

The supply of fruit was likewise seasonal. Apples were the principal fruit seen and small amounts of grapes, pears, and oranges. During

¹ Richter, J. H.: Food rationing in Germany. *Foreign Agriculture*, October 1941.

the summer of 1941, 0.5 kg. of fruit was allowed each adult. The supply of fruit was used principally for the armed forces, the sick, the children, and pregnant women.

The armed forces were undoubtedly well-fed, although no figures were available. Special diets for the sick could be obtained with much difficulty and delay. Pregnant women received extra food.

At the beginning of the war, bread was not rationed; it was claimed that a sufficient supply of grain was available. However, it was found after several months that the consumption of bread had so increased that rationing became necessary.

The two principal types of bread consumed in Germany were the so-called white bread and "Vollkornbrot," or dark bread. The white bread was in reality not white but grey in color. It was made of whole wheat flour containing 5 percent potato starch and 15 percent whole rye flour. The exact ingredients and preparation of bread in the ration period could not be determined definitely but water, not milk, undoubtedly was used in its preparation. Dark bread was prepared from whole rye flour.

The bread became progressively worse during the period from August 1941 to May 1942, especially after the ration reduction in April 1942 was announced, although it is believed that no sawdust was added to bread during this time. All the bread was soggy in texture. Especially after April 1942, the bread was darker in color, more moist, and the dark rye bread had a bitter taste.

According to the residents of Germany there had been little change in the "Zwieback", "Knaeckebrot", and "Schwarzbrot". The latter is made of relatively unmilled cereal grains. Knaeckebrot and Zwieback are quite pleasing to the taste; the former is made from rye flour and the latter from wheat flour. These forms of bread were not consumed to a great extent in Germany because of restrictions. It is not known whether the bread was fortified. In April 1942, it was announced that more of the hull of the grain and bran was to be mixed with the flour, causing the bread to be darker. During the period from December 1941 to April 1942, the 2,250 gm. per week of bread for the average worker was divided as follows: 950 gm. of white bread or 750 gm. of flour, 200 gm. of cake or white bread, and 1,100 gm. of dark bread. The proportion for other workers was the same. From April 1942 to October 1942, one-fifth of the 2,000 gm. weekly bread ration could be purchased as "Feinbaeckerei" (white bread, rolls, cake, pastry, Zwieback and Knaeckebrot) and four-fifths as dark bread.

From December 1941 to April 1942, one-third of the 400-gm. weekly meat ration had to be given up if the meat had no bones. The purchase of 200 gm. as meat or wurst was optional. From

April 1942 to October 1942, the 300-gm. ration included the weight of the bones. Pork was more readily available than beef or veal. Lamb, mutton, rabbit, venison, chicken, and goose were occasionally obtainable. During the early part of the war, game could be purchased at times without food coupons but about the middle of 1941 this was stopped. The wurst, since it lacked the spices used in peacetime, was not very palatable and some varieties contained a large proportion of gelatin. A sausage known as "bratling", made with skimmed milk and soybean, is said to form a mainstay of the German Army ration.²

From December 1941 to April 1942, the 269 gm. of fat allowed weekly for the average worker was divided as follows: 116.0 gm. of butter, 62.5 gm. of margarine, 37.5 gm. of pork fat, and 53.0 gm. of cooking vegetable oil. The proportion of the different fats for the other classes and for the other rationing periods was approximately the same.

After January 15, 1941, the margarine was fortified by a concentrate of vitamins A and D made from the livers of tuna, halibut, red perch, cod, and whale. One cc. of the concentrate was added to 10 kg. of margarine. The Germans claim that this fortification makes the margarine equivalent to butter.

From April 1942 to October 1942, 312.5 gm. of "ersatz" coffee were allowed for each 4-week period, except to children under 3 years of age (since October 1942, coupons for 248 gm. have been issued). The "coffee" was parched whole grain, usually barley, which was ground and prepared as coffee—making a brew which together with skimmed milk and a little sugar has only its warmth to make it palatable.

A large part of the marmalade was said to consist partly or wholly of turnips with artificial coloring and flavor added, making a preparation that was very unpalatable.

No official figures were obtainable for the number of people in the various groups that were rationed. The estimates, including the Saar, Austria, and Sudetenland, were as follows: 8 million up to 6 years of age, 10 million 6 to 14 years of age, 7 to 8 million workers doing heavy work, including 2 million engaged in the heaviest labor, 10 to 12 million self-providers, and 30 to 40 million average workers.

The self-providers in the above group were the farmers and their families. These people were allowed food in proportion to their age and the amount of work done; what they produced above this had to be sold to the State. However, the farm group was probably the best fed in Germany. There were opportunities, of which the farmers took advantage, for holding out food above what they were allowed for self-consumption. On meatless days eggs could be

² Wilder, R. M., and Keys, T. E.: Unusual foods of high nutritive value. *J. Am. Med. Assoc.*, 120: 529-535 (Oct. 17, 1942).

TABLE 1.—Amount of foods in grams per week for German civilians¹

[H. W., heavy worker; V. H. W., very heavy worker; N. W., night or overtime worker; N. O., normal consumer (average worker); AD, adolescent; OH, child]

Class	September 1939 to December 1941	December 1941 to April 1942	April 1942 to Oct. 19, 1942	Oct. 19, 1942 ²	1937, esti- mated con- sumption ³	
Bread						
OH, under 3.....	1,100	1,100	900	1,100	} 2,890	
OH, 3-6.....	1,100	1,100	1,200	1,200		
OH, 6-10.....	1,700	1,700	1,700	1,700		
OH, 10-20.....	2,000	2,600	2,600	2,600		
Over 20, N. O.....	2,400	2,250	2,000	2,250		
N. W.....	2,850	2,850	2,600	2,850		
H. W.....	3,800	3,850	3,400	3,650		
V. H. W.....	4,800	4,650	4,400	4,650		
Fats						
OH, under 3.....	125.00	125.00	125.00	125.00		} 498.00
OH, 3-6.....	127.00	188.00	188.00	188.00		
OH, 6-14.....	258.75	266.00	266.00	265.00		
AD, 14-18.....	305.75	301.00	269.00	265.00		
Over 18, N. O.....	298.75	299.00	296.00	209.00		
N. W.....	298.75	289.00	226.00	220.00		
H. W.....	394.60	394.00	300.00	300.00		
V. H. W.....	740.00	738.00	573.00	570.00		
Sugar						
All classes.....	337.5	290.0	225	225	461	
Meat						
OH, under 6.....	281.25	250	150	200	} 893	
OH, 6-18.....	531.25	400	350	408		
N. O.....	531.25	400	300	350		
N. W.....	631.25	600	450	550		
H. W.....	1,031.25	800	600	700		
V. H. W.....	1,231.25	1,000	650	950		
Cheese						
All classes.....	(4)	(4)	(4)	(4)	104	
Marmalade						
All classes.....	175	175	175	175	-----	
CH, 6-14.....	175	175	175	225	-----	
Milk (liters of whole milk)						
CH, under 3.....	5.25	5.25	5.25	5.25	-----	
CH, 3-6.....	2.50	3.50	3.50	3.50	-----	
CH, 6-14.....	1.75	1.75	1.75	1.75	-----	
Over 14 (skimmed milk only).....	3.50	3.50	0.87	(7)	-----	
Nursing mothers and men in unhealthy occupations.....	3.50	3.50	3.50	3.50	-----	

¹ Obtained partly from records of American Embassy.² From data supplied by Office of War Information.³ These figures are not strictly comparable to the rest since they were obtained only by division of the available food supplies by the number of people and do not show the waste that occurs in handling the food.⁴ 31.25 each of cottage cheese and other cheese.⁵ 31.25 of cottage cheese and 47 of other.⁶ 30.0 cottage cheese and 30.0 other.⁷ Local rationing.

purchased in the rural sections, whereas in the large cities eggs were seldom seen.

The Jews were denied many of the food essentials which the Germans obtained. Jews were not allowed to purchase fresh or dried fruit, marmalade, sweets, cheese, fish, poultry, or game and could buy at the stores only in the afternoon when the best available food had been purchased.

Practically all the German people were able to get more food at times than they were officially allowed, although it is difficult to estimate the amounts. People often received food from relatives in the country. A black market also existed where supplemental food could be purchased for high prices. A pound of coffee, for example, cost in the neighborhood of 80 marks, or about \$30, at the official rate of exchange before the entry of America into the war. The penalties for any illegal dealing in food were very severe. Every day announcements of executions for this offense appeared in the German papers.

The ration appeared to favor large families and the groups which sustain the agriculture, military, and industrial effort of Germany. The "white-collar" class or normal consumer had a considerably reduced ration while the laborers, children, and rural population had a relatively larger food allowance.³

Self-medication with vitamin preparations was not so widespread in Germany as in America, although it is increasing. According to Professor Wirts, the diet supplied the average adult with only 150 mg. of vitamin C per week. In 1940, 5,600,000 tablets of vitamin C (Cebion, trade name) were obtained. A tablet was given daily to infants, mothers, and women past the sixth month of pregnancy. Miners were to be given 14 tablets a week; 12 was estimated as sufficient to supply the weekly need. The tablets were to supply 200 mg. of vitamin C a week.

According to another report obtained on May 10, 1941, workers in the iron and nonferrous metal industries were receiving synthetic C and B vitamins, although the amounts were not stated. Miners received lemon juice. It was also announced that school children, infants, nursing mothers, and pregnant women were given vitamin D as well as C.

The German Government apparently recognized officially that supplementing the ration was necessary for certain classes of the population.

No opportunities were afforded the writers to make detailed examinations of German civilians. However, a number of persons who were questioned complained of loss of weight, constant hunger, easy fatigableness, digestive difficulties, and irritability. The monotony

³ See footnote 1.

and tastelessness of the diet was probably an important factor in the declining morale of the German civilians.

Children and infants seemed to be better nourished than adults and played with the same zest that one observes in children everywhere.

There is considerable doubt about the accuracy and reliability of statistics and reports issued by the German Government on the health of the people since the institution of rationing. Figures appearing in the Reich's Gesundheitsblatt (Berlin, November 25, 1942) and comparing the incidence of infectious diseases for the first 42 weeks of 1942 with the same period for 1941 show increases in tuberculosis, diseases of childhood, typhoid fever, typhus fever, and dysentery. In November 1941, it was stated that infant and maternal mortality were about the same as before the war but that there was an increasingly poor condition in the teeth of the people.

DIET IN OCCUPIED COUNTRIES

Incomplete figures were obtained for the food ration in the occupied countries. A waiter in the former Polish town of Posen near the former German-Polish border gave the information that a family of four with two children under the age of 16 received the following weekly ration per person:

Meat—200 gm.	Fats—none.
Bread—2,250 gm.	Cheese—62.5 gm.
Sugar—125.0 gm.	Potatoes—unrationed.
Rolled oats, dried peas, dried beans, etc.—150 gm.	Fresh vegetables and milk—none.

These figures were obtained in October 1941, and the ration has probably been scaled down since that time. However, the Poles in rural areas and in small towns were often able to buy vegetables, fruit, meat, and poultry from the Polish farmers. In fact, the Poles traded such articles with the British prisoners of war in a camp near Thorn in the former Polish Corridor for tea, coffee, and chocolate which the British received in their Red Cross parcels. The quantities of food allowed the Poles and Jews vary in different localities.

In occupied France the food allowance was rather liberal for several months after the German occupation. However, the ration was scaled down and even the small amounts allowed were at times unobtainable.

As in Germany, the farmers were able to keep more food than allowed by the authorities, and small amounts of this "bootleg" food could be obtained occasionally. A black market existed in France where food could be purchased. The illicit buying of food was naturally limited to a few people with money.

The bread in occupied France was not standardized as in Germany; it varied considerably in color and texture. Little wheat or rye

TABLE 2.—Amounts of food, in grams per week, for French civilians about December 1942¹ (see table 1 for meaning of abbreviations)

Class	Meat		Bread	Fats	Milk (liters of whole milk)	Sugar
	U. C. ²	R. C. ²				
CH, under 3.....	250	180	700	70	5.25	300
CH, 3-6.....	250	180	1,400	70	5.25	125
Old people.....	250	180	1,400	70	-----	125
CH, 6-13.....	250	180	1,925	70	1.75	125
A.D., 13-21.....	337	267	2,450	70	-----	125
N. C.....	250	180	1,925	70	-----	125
H. W.....	355	285	2,450	145	-----	125
Miners.....	525	525	4,200	220	-----	125
V. H. W.....	465	590	2,450	220	-----	125
Expectant and nursing mothers.....	250	180	1,925	70	3.50	125

Cheese—all classes, 50. Allimentary pastes—all classes, 60.

Rice—CH under 3, 75; CH 3-6, A.D. and old people, 30.

Wine—N. C., 1 liter; H. W., 2 liters; V. H. W., 3 liters.

Chocolate—CH 3-6, A.D. and old people, 30.

Potatoes, fruit, vegetables, fish, poultry, and skimmed milk—locally rationed.

1 or 2 eggs a month can occasionally be purchased.

¹ From data supplied by the Office of War Information.

² U. C., urban communes; R. C., rural communes.

was available and a large proportion of buckwheat was used. Yeast was difficult to obtain.

Food in the Protectorate of Bohemia-Moravia was rationed in about the same quantities as in Germany since October 1942. Belgium was on about the same ration as France; that in Holland was about midway between France and Germany. Italy's ration was roughly one-half to three-quarters of that in Germany. Rationing was not as strict in Denmark as in Germany. In all of the occupied countries the supply of food probably was seldom sufficient to allow each person to obtain his rationed share.

THE DIET IN THE PRISONER-OF-WAR CAMPS

There are millions of prisoners of war in Germany at the present time. According to the figures of the prisoner-of-war section of the American Embassy, the British numbered about 63,000 and the Belgians about 80,000 up to December 7, 1941. There were no official figures available for the Russians, French, Yugoslavs, Poles, and Dutch.

The writers visited many of the British and Belgian prisoner-of-war camps during the period from August to December 1941. The diet in these camps for prisoners who did not work was about the same as the German "normal consumer" ration. Extra food was allowed for prisoners who performed hard work. However, many of the prisoners, especially the Belgians, worked on the German farms where, according to their own statements, the amount of food furnished was greater than that which the men in the camps received. In addition, the British were being sent one Red Cross package per week; the Belgians and French received packages less regularly.

TABLE 3.—*Typical menu for British and Belgian prisoners of war (Reserve Lazaret Rottenmuenster). Amounts in grams per person*

Day	Noon meal	Evening meal	Breakfast
Tuesday, Oct. 21, 1941	Beef..... 60	Cheese..... 125	Tea ¹ 4
	Cabbage..... 400	Potatoes (unpeeled) 400	Sugar..... 20
	Turnips..... 250	Tea..... 4	Marmalade..... 25
	Potatoes..... 400	Sugar..... 20	Bread ² 325
	Pork fat..... 3		
	Salt..... 12		
	Soybeans..... 6		
Wednesday, Oct. 22, 1941	Carrots..... 250	Pork..... 30	Tea..... 4
	Cabbage..... 400	Mushrooms..... 20	Sugar..... 20
	Potatoes..... 400	Potatoes..... 400	Honey ³ 20
	Peas..... 55	Butter or margarine..... 40	Bread..... 325
	Pork fat..... 3	Mustard.....	
	Salt..... 12		
	Soybeans..... 6		
Thursday, Oct. 23, 1941	Beef..... 30	Corn meal..... 25	Tea..... 4
	Pork..... 30	Potatoes..... 300	Sugar..... 20
	Noodles..... 60		Butter or margarine..... 40
	Pork fat..... 3		Bread..... 325
	Salt..... 12		
	Soybeans..... 6		
Friday, Oct. 24, 1941	Codfish..... 100	Rollod oats..... 25	Tea..... 4
	Potatoes..... 400	Potatoes..... 400	Sugar..... 20
	White beans..... 75	Pork fat..... 3	Marmalade..... 25
	Rye flour..... 10		Bread..... 325
	Pork..... 60	Cottage cheese..... 125	Tea..... 4
	Beets..... 400	Potatoes..... 400	Sugar..... 20
	Potatoes..... 400	Butter or margarine..... 40	Honey..... 20
Pork fat..... 3	Sausage..... 60	Bread..... 325	
Saturday, Oct. 25, 1941	Beef..... 60	Tea..... 4	Tea..... 4
	Potatoes (mashed) 400	Sugar..... 20	Sugar..... 20
	Rye flour..... 10	Marmalade..... 25	Honey..... 20
	Pork fat..... 3	Bread..... 325	Bread..... 325
	Salt..... 12		
	Soybeans..... 6		
Sunday, Oct. 26, 1941	Beef..... 25	Rice..... 25	Tea..... 4
	Pork..... 25	Potatoes..... 400	Sugar..... 20
	Potatoes..... 400		Honey..... 20
	Butter or margarine..... 40		Bread..... 300
	Mushrooms..... 20		
	Salt..... 12		
	Soybeans..... 6		
Monday, Oct. 27, 1941	Beef..... 25		
	Pork..... 25		
	Potatoes..... 400		
	Butter or margarine..... 40		
	Mushrooms..... 20		
	Salt..... 12		
	Soybeans..... 6		
Tuesday, Oct. 28, 1941	Beef..... 20	Potatoes..... 400	Tea..... 4
	Pork..... 20	Turnips..... 250	Sugar..... 20
	Mushrooms..... 20		Marmalade..... 25
	Potatoes..... 400		Bread..... 325
	Noodles..... 60		
	Potatoes..... 300		
	Carrots..... 300		
Pork fat..... 3			
Wednesday, Oct. 29, 1941	Salt..... 12		
	Soybeans..... 6		
	Beef..... 20	Cheese..... 125	Tea..... 4
	Pork..... 20	Potatoes..... 400	Sugar..... 20
	Mushrooms..... 20	Rye flour..... 10	Honey..... 20
	Potatoes..... 400	Pork fat..... 3	Bread..... 325
	Noodles..... 60	Butter or margarine..... 40	Tea..... 4
Potatoes..... 300	Potatoes (unpeeled) 400	Sugar..... 20	
Carrots..... 300	Tea..... 4	Marmalade..... 25	
Pork fat..... 3	Sugar..... 20	Bread..... 325	
Thursday, Oct. 30, 1941	Salt..... 12		
	Soybeans..... 6		
	Codfish..... 100	Barley..... 25	Tea..... 4
	Potatoes..... 500	Sausage..... 60	Sugar..... 20
	Rye flour..... 10		Honey..... 20
	Pork fat..... 3		Bread..... 325
	Salt..... 12		
Friday, Oct. 31, 1941			

¹ All tea is peppermint.

² All the bread is made of whole rye flour.

³ All the honey is artificial.

It was determined by questioning the prisoners (when no Germans were present) that generally they were given what their menus called for. Occasionally substitutions were made, but an equivalent amount of the same type of food was supplied.

No opportunity was afforded to examine these men thoroughly for deficiencies. However, in the British camps especially, the men played

football and other games constantly. Only in one group was any deficiency disease seen. There were about 75 cases of beri-beri among a group of British soldiers and sailors captured in the Greek and Crete campaigns. These men had been in hospitals or prisoner-of-war camps in Athens and Salonika for 4 or 5 months before being transferred to Germany. Not only did deficiency diseases occur among the British in Greece but there were epidemics of dysentery, typhoid fever, and malaria. The British physicians had difficulty in obtaining parenteral and oral preparations of thiamine for treatment of the beri-beri cases, although in November, 2 months after the cases were first seen, many had recovered.

During their first winter of captivity, there were many cases of diphtheria, dysentery, acute nephritis, tuberculosis, chronic leg ulcers, and skin infections among men who were taken prisoners in France and Flanders.

A few Russian prisoners of war were seen in these camps. Their diet was found to be far poorer than that of the other prisoners. No exact figures could be obtained but enough facts to substantiate this were gathered from the statements of the prisoners who could speak a little German and from unguarded remarks made by German officers and civilians. One German officer stated that many of the Russians had swollen legs and feet. The writers believe this condition to have been due to beri-beri. All of the Russian prisoners were pitifully thin and many had protruding abdomens.

DIET AND EXAMINATION OF THE AMERICANS INTERNED AT BAD NAUHEIM

On December 14, 1941, the American diplomatic group in Berlin, together with the newspaper correspondents, were taken to Bad Nauheim and interned there until May 12, 1942. This group consisted of 135 persons. While there, they were given approximately the same food as the average German worker during the period December 1941 to April 1942. The exact amounts could not be determined, as the German authorities refused to furnish a record of the amounts allowed for each person, and no scales were available for weighing the food. In addition, each person received from the Embassy Commissary in Berlin the food listed in table 4.

About 15 persons had small supplies of vitamin preparations of various kinds which they took while interned. In the last month of the internment period, a supply of eggs, bacon, and butter was obtained from Denmark. This was distributed to the 6 children present and about 10 people who were ill. Some of the persons interned had brought small amounts of food with them from Berlin. The total amount of food available to this group was thus greater than that given the average German worker.

TABLE 4.—*Supplemental food per person furnished internees at Bad Nauheim*

Canned soup:		Condensed milk	1.9 tin.
Pea	0.3 can.	Tuna fish	0.2 tin.
Tomato	1.7 can.	Brown bread	0.2 tin.
Clam chowder	0.6 can.	Saltina crackers	1.2 tin.
Chicken	1.1 can.	B & M beans	0.2 tin.
Vegetable	1.0 can.	Campbell's beans	0.6 tin.
Mushroom	0.6 can.	Pineapple	0.2 tin.
Butter	1.0 1-lb. can.	Pears	0.4 tin.
Peanut butter	3.3 1-lb. jar.	Apricots	2.0 tin.
Crisco	0.3 lb.	Yellow cling peaches	1.0 tin.
Vienna sausage	4.4 tin.	Dried apricots	0.3 pkg.
Salmon	0.9 tin.	Fruit salad	0.9 tin.
Corned beef	2.3 tin.	Orange juice	1.2 tin.
Spam	0.5 tin.	Grapefruit juice	1.7 tin.
Bacon	0.8 lb.	Tomato juice	3.4 tin.
Lamb stew	0.3 tin.		

Before the war the diplomatic group had lived on a diet similar to that of the average American. They were given a ration about three times that of the average German worker; they received butter, eggs, bacon, ham, and poultry from Denmark; and tinned and boxed food was available in the Embassy Commissary. The newspaper correspondents had received the ration of the Germans doing the heaviest work.

The food was from the first tasteless and unpalatable. Vegetables were invariably boiled with a little salt and served with the addition of a small amount of flour. Nothing was properly seasoned; the same was true of the food served to the German civilians. It was observed, however, that the Americans tolerated the diet less well than the Germans did, probably because the Americans had been placed abruptly on a reduced ration, while that of the Germans had been scaled down gradually. Quite often members of the American group refused to eat certain food because of distaste or resulting abdominal discomfort. An especially notorious offender was "griesmehl", a form of corn meal moistened with water and fried in a very small amount of fat.

In April 1942, after about 4 months of internment, because of many complaints of bloating, irritability, loss of weight, fatigue, etc., by individual members of the group, the writers decided to examine each member of the group who would consent to the examination. Few facilities were available; no laboratory work was possible and a history and physical examination, with special attention to signs of vitamin deficiency, constituted the extent of the examination. Of the 135 persons interned, 111 were examined. The age range was from 2 to 59 years; four-fifths were in the age group 20 to 50 years. The results of the examinations are tabulated in table 5.

The average weight loss for the group was 8.8 pounds per person, 10 pounds for the men and 6.7 pounds for the women. These figures do not include 18 of the group on whom no previous figures were available.

The weight change for the men, varying from a loss of 34 pounds to a gain of 9 pounds, showed that 54 men lost weight, 6 gained weight, 2 showed no change, and 8 did not know but 5 thought they had lost weight.

TABLE 5.—*Results of examinations of internees at Bad Nauheim*

Symptoms	Number of persons	Signs	Number of persons
Fatigue.....	30	Cheliosis.....	3
Sore mouth and tongue.....	2	Stomatitis.....	1
Nervousness and irritability.....	15	Spongy, bleeding gums.....	9
Night blindness.....	2	Anemia (clinical examination only).....	9
Burning and itching of eyes.....	2	Conjunctivitis.....	2
Sore, bleeding gums.....	6	Dryness and thinness of mucosa of lips and skin, and brittleness of nails.....	34
Mouth lesions.....	8	Seborrheic dermatitis of face.....	2
Constipation.....	15		
Flatulence, gas pains, and passage of much flatus.....	39		

The weight change for the women, varying from a loss of 16 pounds to a gain of 7 pounds, showed that 21 women lost weight, 5 gained weight, 5 showed no change, and 10 did not know but 3 thought they had lost weight.

The previous weights of all persons examined were determined by asking each one what his weight had been before internment and are therefore, in some cases, unreliable. However, most of the group had been keeping a record of their weight.

The first few weeks many persons complained of constant hunger but later the hunger pains became less acute. Three persons complained of gingivitis soon after the outbreak of the war. They had been living in Germany and one claimed that he had received only the German civilian ration during that time. Two people had ichthyosis which was intensified during their internment. A common complaint was a craving for fat. The small amount of bacon obtainable was either eaten raw or was fried and the grease carefully saved to spread on bread. Crisco was eaten the same way with a little salt. The symptoms of nervousness, irritability, and fatigue in some cases were probably caused by confinement alone.

The activities of all members of the group were greatly restricted during the period of internment so that their exertions were less than those of the average "white collar" worker. The only exercise that most of this group took was walking up and down several flights of steps to meals.

One case of pulmonary tuberculosis developed during the internment period. Five cases of stomatitis with numerous herpetic lesions occurred. The first symptoms were malaise, an elevation of temperature ranging from 38.0° to 40.0° C., and bilateral cervical lymphadenitis. Within 1 to 3 days the gums became red and swollen. This was followed by the appearance of numerous small, shallow ulcers

with whitish bases on the gums, tongue, labial mucous membrane, and pharynx. The mouth and throat became very painful and eating and swallowing were difficult. The cases appeared to run a self-limited course of 8 to 10 days, the ulcers healing and the temperature dropping gradually.

From this rather superficial examination it was evident that a diet considerably better than the diet of the German civilians was inadequate to maintain weight and a sense of well-being among the interned Americans.

SURVEYS OF MILK LABORATORIES IN WAR AREAS IN THE UNITED STATES ¹

III. OBSERVATIONS ON SAMPLING AND HEALTH DEPARTMENT PRACTICE RELATIVE TO BACTERIOLOGICAL MILK ANALYSIS

By LUTHER A. BLACK, *Senior Bacteriologist, United States Public Health Service*

PROCEDURE

In preceding papers (1, 2) summaries were presented of methods used in bacteriological analysis of milk in 408 municipal or State laboratories surveyed in the 48 States. The general plan of procedure, forms used, and extent of the survey were discussed therein. In this last paper of the series, a similar detailed analysis has been prepared of the deviations observed relative to the requirements of Standard Methods on sampling, certain requirements of health department practice pertaining to milk analysis in communities operating under the Milk Ordinance and Code recommended by the United States Public Health Service, and certain miscellaneous information pertaining to quarters and laboratory facilities, the lack of which, though not included in Standard Methods, might conceivably affect the accuracy of the results.

In the interest of clarity, the figures presented in the following tables list only *deviations*, items *undetermined* because of local conditions at the time of the survey, or items *not used* in the particular laboratory. Thus common deviations may be readily singled out; some of these will be discussed briefly.

The original survey forms based on the seventh edition of Standard Methods were used in 116 surveys from September 1941 until January 1942; thereafter revised forms, based on the eighth edition, were used for the remaining 292 laboratories surveyed. In the revised form the material on sampling, health department practice, and miscellaneous information was brought together on one page, and a few items found desirable by experience were included in addition to those originally listed. In preparing the tables for this paper, the survey results

¹ From the Sanitation Section, States Relations Division.

recorded on the earlier forms were tabulated upon the present forms. This resulted in unduly large figures under *undetermined* in the case of items not included on the original form. Likewise, the later surveys included a few additional items, which were marked either *undetermined* or *not used* when transferring the earlier surveys to the revised forms.

EXTENT OF OBSERVATIONS

A summary indicating the extent of the observations made is presented in table 1, arranged by the same geographic divisions as in the preceding papers. Quite often no individual responsible for collection of the samples was available at the time of the laboratory survey; consequently, information on sampling was obtained and recorded at only 261 of the 408 laboratories surveyed. Health department practices suggested in the Milk Ordinance and Code recommended by the United States Public Health Service were observed at only 149 laboratories, as this ordinance was not in effect in the six New England and three Middle Atlantic States, and elsewhere the laboratories were sometimes located at places other than the health department. The material pertaining to quarters and facilities, not being required by Standard Methods, was not a part of the original survey forms, and such observations were not recorded routinely in the earlier surveys; however, 334 records were made for the 408 laboratories surveyed.

TABLE 1.—*Milk laboratories surveyed*

Geographic divisions ¹	Total	Observations made on—		
		Sampling	Practice	Quarters, etc.
New England (6).....	30	1	0	0
Middle Atlantic (3).....	20	3	0	0
East North Central (5).....	32	23	5	12
West North Central (7).....	115	101	68	116
South Atlantic (9).....	60	36	23	58
East South Central (4).....	19	13	5	16
West South Central (4).....	33	24	25	33
Mountain (8).....	41	22	13	41
Pacific (3).....	58	38	10	58
Total.....	408	261	149	334

¹ Figures in parentheses indicate number of States included. The District of Columbia is counted as a State.

SAMPLING

The requirements of Standard Methods pertaining to sampling, and a summary of the results showing deviations from Standard Methods, are listed in table 2 by geographic divisions with the totals for all States. Nearly one-fourth of the laboratories definitely failed to make bacteriological examinations of retail cream, and in a considerable number of other places it was not determined whether such examinations were made. In a number of instances samples were not collected

from the delivery vehicle but were taken from the plant or from retail stores. It was rather common practice to sample only one size of retail container. Nearly one-third of the laboratories failed to collect samples from each size of container or of a representative percentage of each size of container, as stipulated by Standard Methods; in a considerable number of additional instances this item remained undetermined. As shown in table 2, less than 20 percent of the laboratories protected the caps and lips of retail samples with suitable waterproof covering in transit to the laboratory.

In collecting samples from producers there were several instances where the milk was intentionally not mixed before sampling, and in other instances this item could not be determined. It was impossible to determine whether or not stirrers were sterilized satisfactorily before use, hence the large number in the *undetermined* column for this detail. In part this was due to rather common use of chlorine or hot water for practical sterilization of such sampling equipment at the plant with universal failure to comply with the requirement of Standard Methods that, where such means are used and plate counts are made on such samples, the laboratory should "Plate samples of the rinse and sterilizing solutions each day when sampling is completed." In a number of instances samples were collected in containers that were not leakproof or the sterilization of which was questionable, or directly into smaller milk bottles available at the plant, either without further treatment or sometimes after rinsing in a chlorine solution. Sample bottles were sometimes filled to the top, rendering thorough agitation more difficult and not complying with the Standard Methods requirement to "Avoid filling the container more than two-thirds full." The practices in taking samples usually were not actually observed, and the notations were based largely on the procedure described by the local milk inspectors taking such samples, together with such corroborative evidence available in the laboratory as sampling equipment, the samples themselves, and past records. Where any doubt existed this detail was noted as *undetermined*, thus accounting for the larger numbers of items so recorded.

Cooling of the samples was generally practiced. There was some doubt that sample containers had "compartments or baffles to hold the sample containers in a vertical position," as specified by Standard Methods. Most places did not "test each lot of samples and record the observed temperature on the analysis report," and since this is stipulated as desirable "where conditions under which samples are received vary from day to day," this item was marked *not used* in many instances.

Identification of the samples was generally well done. Many laboratories failed to record the time of analysis, however, and many

TABLE 2.—Summary of items pertaining to sampling, indicating lack of conformity with Standard Methods for the Examination of Dairy Products (eighth edition)

	Total		New England		Middle Atlantic		East North Central		West North Central		South Atlantic		East South Central		West South Central		Mountain		Pacific	
	261		1		3		23		101		36		13		24		22		38	
	De	Un	De	Un	De	Un	De	Un	De	Un	De	Un	De	Un	De	Un	De	Un	De	Un
1. Collection—authorized control officials. Each 6-month period at least 4 samples on separate days*.....	3	18	0	0	0	0	2	2	3	5	0	0	4	2	2	2	3	3	2	2
Milk.....	15	15	0	0	0	0	1	1	14	4	5	0	4	2	2	1	2	2	2	2
Cream.....	69	43	0	1	1	1	5	2	24	23	1	14	1	5	3	8	3	1	4	3
Each farm.....	9	26	0	0	1	1	3	2	3	6	10	1	2	2	2	4	4	4	4	1
Immediately after delivery.....	6	30	0	0	1	1	2	2	2	12	10	1	3	2	2	4	4	4	2	1
Each plant.....	3	14	0	0	0	0	1	1	3	3	0	0	2	2	2	4	4	2	2	2
From delivery vehicle.....	18	65	0	0	1	1	2	2	13	38	1	2	4	4	2	4	1	3	1	11
Satisfactory transportation of samples.....	1	39	0	0	0	0	4	4	1	18	1	1	4	6	6	4	4	4	2	2
A. Retail: from or of representative percentage of each size.....	77	51	1	0	0	0	2	2	48	36	1	12	2	6	1	6	5	3	4	4
Original unopened container.....	2	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0
Protect caps and lips by suitable waterproof covering.....	193	16	3	1	2	2	11	3	83	6	2	25	4	18	2	1	15	3	34	1
B. Wholesale: previously unopened container.....	6	33	25	1	1	1	5	9	8	16	3	3	1	1	1	3	3	5	4	4
Agitate vigorously by stirring (or repeated inversions).....	18	48	26	0	1	1	7	7	6	17	16	3	3	3	2	4	6	6	10	1
Satisfactory sterilization of stirrer.....	39	37	26	0	2	2	17	17	2	67	24	1	8	12	2	9	6	2	24	9
Use sterile suitable metal or glass sampling tubes properly, or mix well and immediately dip or catch.....	7	33	25	0	0	0	5	5	2	12	16	2	4	1	1	2	3	5	1	5
Handle container and caps aseptically.....	78	25	0	0	0	0	23	23	21	16	10	3	13	4	4	3	5	4	4	1
Not less than 10 ml. sample.....	43	41	26	0	0	0	5	5	23	13	17	9	3	2	6	3	5	3	5	4
Sterile suitable leakproof container.....	39	37	26	0	0	0	4	4	6	23	17	4	3	5	3	4	5	3	6	1
Avoid filling over two-thirds full.....	5	31	6	0	0	0	4	4	25	12	17	4	3	3	3	5	4	5	4	1
Storage below 50° F. (below 45° F. unless analyzed within 4 hours).....	7	19	0	0	0	0	3	3	4	8	1	1	1	2	2	2	2	2	4	4
Provide compartments or baffles to hold containers vertical.....	28	113	3	0	0	0	23	23	20	44	1	1	15	4	8	2	5	1	5	5
Bacteriological sample removed before inserting thermometer.....	1	56	2	0	0	0	23	23	4	1	1	9	1	13	2	2	2	2	3	3

(Desirable) where conditions vary, test each lot.	15	133	0	0	0	2	4	04	2	1	1	11	2	14	4	13
And record temperature legibly and indelibly	57	133	0	0	23	4	04	10	1	13	1	11	2	14	4	13
3. Identification—promptly identify	5	4	0	1	0	3	0	0	1	1	0	0	0	0	0	1
Official number or tag	12	55	0	1	2	43	1	1	3	1	2	2	2	1	1	1
Record time of sampling if interval before examination exceeds 4 hours.	58	51	0	1	3	16	28	1	7	3	1	9	4	2	17	9

* Indicates modification required by P. H. S. Code.

De = Deviations.

No = Not used.

** Weigh-vat samples satisfactory but usually not recognized for legal action.

sample collectors failed to comply with the provision that "if the interval between sampling and examination exceeds 4 hours, record on the analysis report the time of sampling and the time of examination."

Ambiguous statements appear in Standard Methods relative to sampling, and clarification of some of these statements would make more readily apparent the intent and extent of its application.

HEALTH DEPARTMENT PRACTICE

Of the 408 laboratories surveyed in the 48 States, 149 of those analyzing supplies for communities operating under the Milk Ordinance and Code recommended by the United States Public Health Service furnished information relative to the practices used in handling and reporting bacteriological results. This material is tabulated in table 3 and shows deviations from the requirements. About one-fifth of the departments definitely did not follow the requirement of averaging the results of the last four consecutive samples taken on separate days, and in a somewhat larger number of instances compliance could not be determined. Similarly, one-fourth did not average bacterial counts by the logarithmic method, and in some instances this item remained undetermined. There was less deviation in record keeping, however. Lastly, there were a few places in which violations definitely were not followed up, and a larger number recorded as *undetermined* since this type of information was less readily obtainable.

Tests of containers were generally neglected. Only 11 of the 149 laboratories actually made tests, and one-half of the departments definitely violated this requirement, with others marked *undetermined* or *not used*. Still fewer laboratories analyzed samples monthly, as shown in table 3. Only two laboratories used a disintegration test on paper containers; many places, however, did not use such containers. Most of the 11 departments testing containers used standard technique and enforced the Public Health Service standards.

Neglect in testing the sterility of containers was the outstanding deviation from the requirements relative to health department practice.

TABLE 3.—Summary of items pertaining to requirements under the United States Public Health Service Milk Ordinance and Code

	Total			East North Central			West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
	149			5			68			23			5			25			13			10			
	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	
Number of laboratories observed.....																									
Health department practice—counts from samples not published.....	1	23					1	1																	
Average of results of last 4 consecutive samples on separate days used.....	31	38	1				18	11	1	7	8														
Averaging of bacterial counts done by logarithmic method (arithmetic average of reduction times for reductase test).....	37	24	1				24	2	1	5	8														
Adequate records kept.....	15	13		0			6	7		6	2														
Ledger sheets for each dairy and plant.....	16	11		0			8	6		6	1														
Laboratory results and health examinations recorded.....	12	23	4	1			4	13	4	3	2														
Posted to date.....	23	12	4	0			15	5	4	3	1														
Violations followed up.....	9	96		0			7	48		1	11														
Tests of containers—rinse count made on bottles, cans, paper containers, caps, and covers.....	75	23	40	3			36	2	30	7	10	4													
Monthly samples.....	80	20	40	3			37		30	12	3	4													
Disintegration test on paper stock.....	14	15	118	5			8		60	2	4	15													
Standard Methods technique.....	10	63	65	5			2	14	52	3	14	4													
F. H. S. standards enforced.....	9	56	68	3			1	10	51	4	7	4													

No = Not used.

Un = Undetermined.

De = Deviations.

TABLE 4.—Miscellaneous information not required by Standard Methods

	Total			East North Central			West North Central			South Atlantic			East South Central			West South Central			Mountain			Pacific			
	334			12			116			58			16			33			41			58			
	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	De	Un	No	
Number of laboratories observed.....																									
Copy of Standard Methods available in laboratory.....																									
Latest edition.....	45	43	9	12	12	0	19	5	5	10	9	16	4	1	1	1	1	1	1	1	1	1	1	1	1
Quarters—floors clean.....	161	48	9	0	12	0	47	1	8	32	16	10	18	3	1	1	1	1	1	1	1	1	1	1	1
Walls and ceilings smooth.....	23	9	0	0	0	0	11	5	4	4	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Doors and windows screened, or flies absent.....	11	13	0	0	0	0	9	8	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rodents and insects absent.....	1	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lighting adequate.....	8	20	0	0	0	0	7	15	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ventilation adequate.....	1	12	0	0	0	0	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free from drafts.....	9	82	1	1	0	0	2	34	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free from dust.....	15	7	0	0	0	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Room temperature not extreme.....	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily cleaning.....	16	16	0	0	0	0	5	8	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Free from confusion.....	8	7	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Space adequate.....	23	38	0	1	0	0	8	10	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Used for laboratory purposes only.....	48	21	0	0	0	0	19	11	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Facilities—table space adequate.....	19	17	0	0	0	0	7	5	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Storage adequate.....	34	29	0	0	0	0	8	14	11	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Utilities adequate.....	5	6	0	0	0	0	4	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cabinets, shelves, etc., clean.....	14	8	0	0	0	0	6	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment neat and clean.....	9	3	0	0	0	0	5	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clean outer garments worn.....	28	97	3	2	0	0	2	56	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Clothing stored outside laboratory or in closet.....	9	2	0	0	0	0	5	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

No=Not used.

Un=Undetermined.

De=Deviations.

QUARTERS AND FACILITIES

In table 4 are presented tabulations of the miscellaneous information secured, especially relative to quarters and facilities, none of which is required by Standard Methods.

It is of interest to note that of the 334 laboratories for which such information was obtained, 45 definitely did not have any copy of Standard Methods, and in 43 additional instances possession was questionable. Some 161 did not have the latest edition.

In general, the quarters were adequate for the amount of milk analyzed. A small number of laboratories had unclean floors, had inadequate lighting, were dusty, were not cleaned daily, or were not free from confusion. In a larger number the space was not adequate, and in a considerable number of places the use of rooms was not restricted to laboratory purposes. A variety of quarters was used, ranging from a converted city jail cell or small room over the city abattoir (both cleaner and better painted, however, than many more typical laboratory quarters) to separate laboratory rooms originally built for such analyses.

The facilities in general were adequate for the amount of work being done in milk analysis. Some of the laboratories were lacking in proper storage facilities. The detail concerning "clean outer garments worn" was considered complied with by clean laboratory coats or aprons. While these are considered preferable, it was not the intention to discredit their absence by marking as a deviation; accordingly, in many cases this was recorded as *undetermined*, thus accounting for the larger number in the *undetermined*, column for this detail.

It is the author's opinion that failure to conform to some of the items listed under quarters and facilities had a direct relation to the accuracy of the results obtained, to say nothing of the psychological value of proper quarters. It would seem that certain minimum standards of laboratory housing might well be included in Standard Methods for the Examination of Dairy Products.

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INCIDENCE OF HOSPITALIZATION, AUGUST AND SEPTEMBER 1943

Through the cooperation of the Hospital Service Plan Commission of the American Hospital Association, data on hospital admissions among about 8,000,000 members of Blue Cross Hospital Service Plans are presented monthly. These plans provide prepaid hospital service. The data cover about 60 hospital service plans scattered throughout the country, mostly in large cities.

Item	August	
	1942	1943
1. Number of plans supplying data.....	63	71
2. Number of persons eligible for hospital care.....	8,889,867	10,821,657
3. Number of persons admitted for hospital care.....	91,467	109,425
4. Incidence per 1,000 persons, annual rate, during current month (daily rate x 365).....	121.1	119.0
5. Incidence per 1,000 persons, annual rate for the 12 months ended Aug. 31, 1943.....	107.5	105.4
	September	
1. Number of plans supplying data.....	60	62
2. Number of persons eligible for hospital care.....	8,563,567	9,886,661
3. Number of persons admitted for hospital care.....	78,140	92,113
4. Incidence per 1,000 persons, annual rate, during current month (daily rate x 365).....	1100.9	113.4
5. Incidence per 1,000 persons, annual rate for the 12 months ended Sept. 30, 1943.....	107.5	105.6

DEATHS DURING WEEK ENDED OCTOBER 30, 1943

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

	Week ended Oct. 30, 1943	Corresponding week, 1942
Data for 87 large cities of the United States:		
Total deaths.....	8,636	8,393
Average for 3 prior years.....	8,041	-----
Total deaths, first 43 weeks of year.....	380,683	353,104
Deaths under 1 year of age.....	628	692
Average for 3 prior years.....	598	-----
Deaths under 1 year of age, first 43 weeks of year.....	27,215	24,366
Data from industrial insurance companies:		
Policies in force.....	65,993,760	65,198,406
Number of death claims.....	12,418	11,834
Death claims per 1,000 policies in force, annual rate.....	9.8	9.5
Death claims per 1,000 policies, first 43 weeks of year, annual rate.....	9.7	9.2

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 NOVEMBER 6, 1943

Summary

A total of 193 cases of meningococcus meningitis was reported, as compared with 198 last week and a 5-year (1938-42) median of 32. States reporting 6 or more cases for the week (last week's figures in parentheses) are as follows: Massachusetts 7 (12), New York 42 (26), New Jersey 8 (6), Pennsylvania 14 (15), Ohio 9 (4), Illinois 14 (10), Maryland 6 (7), Kentucky 7 (4), Texas 9 (2), and California 7 (8).

To date, 15,573 cases have been reported (nearly 58 percent more than the highest number recorded for any prior entire year of record), as compared with 2,970 for the same period last year and a 5-year median of 1,735. The cumulative total since the beginning of the fourth quarter of the present year is 1,045, as compared with 299 for the same period last year and a median of 164 for the corresponding periods of the past 5 years. In 1929, the year of highest recorded incidence, the comparable number was 505.

A further sharp decline was recorded in the incidence of poliomyelitis, a total of 259 cases being reported, as compared with 363 for the preceding week. The 5-year median is 207. The largest numbers were reported in California (59) and Illinois (23). Six other States reported 12 to 18 cases each. The cumulative total to date is 11,379 as compared with 3,624 for the same period last year and a 5-year median of 6,452.

The total numbers of cases reported for the week of influenza, measles, and scarlet fever are above the corresponding 5-year medians, while those of diphtheria, smallpox, typhoid fever, and whooping cough are below the medians.

Deaths recorded for the week in 89 large cities of the United States aggregated 8,611, as compared with 8,804 for the preceding week and a 3-year (1940-42) average of 8,192. The cumulative total for the first 44 weeks of the year is 396,734, as compared with 368,055 for the same period last year.

Telegraphic morbidity reports from State health officers for the week ended November 6, 1943, and comparison with corresponding week of 1942 and 5-year median

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

Division and State	Diphtheria			Influenza			Measles			Meningitis, meningococcus		
	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42	Week ended		Med-ian 1938-42
	Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942	
NEW ENGLAND												
Maine.....	1	1	1	1		64	0	30	3	2	0	
New Hampshire.....	0	0	0		2	16	21	0	1	0	0	
Vermont.....	0	0	0			19	104	8	1	0	0	
Massachusetts.....	2	2	3			157	208	165	7	4	0	
Rhode Island.....	3	1	1			22	0	0	1	1	0	
Connecticut.....	1	0	1	2	3	2	14	49	37	2	1	
MIDDLE ATLANTIC												
New York.....	9	13	16	14	19	19	135	126	128	42	13	
New Jersey.....	1	5	10	7	10	6	182	19	17	8	2	
Pennsylvania.....	8	13	15	3	3		143	190	112	14	3	
EAST NORTH CENTRAL												
Ohio.....	15	31	31	2	11	11	386	26	26	9	2	
Indiana.....	32	8	22	12	17	16	80	16	9	5	0	
Illinois.....	9	40	30	2	8	8	39	38	31	14	1	
Michigan ¹	10	7	7	4			232	152	71	5	1	
Wisconsin.....	4	2	2	12	27	24	334	54	54	2	1	
WEST NORTH CENTRAL												
Minnesota.....	9	6	4		3	1	407	3	9	2	2	
Iowa.....	8	1	8		2	1	17	25	25	0	0	
Missouri.....	3	5	13			5	6	9	5	1	1	
North Dakota.....	1	3	3	4			109	1	4	0	1	
South Dakota.....	7	9	3				68	0	3	0	1	
Nebraska.....	3	14	2	1	1	1	3	47	3	1	0	
Kansas.....	9	4	5	1	2	2	2	0	5	1	0	
SOUTH ATLANTIC												
Delaware.....	0	0	0				12	0	3	1	0	
Maryland ¹	7	6	6	2	5	5	14	18	16	6	7	
District of Columbia.....	0	1	2		1	1	5	0	0	2	1	
Virginia.....	13	25	37	115	187	70	214	2	20	4	2	
West Virginia.....	8	32	21	2	20	10	30	7	7	2	0	
North Carolina.....	29	65	140	9		2	41	4	84	3	0	
South Carolina.....	19	50	32	272	285	294	63	2	3	1	0	
Georgia.....	25	25	34	25	38	20	11	1	2	1	1	
Florida.....	8	8	8	3	3	2	26	2	3	2	0	
EAST SOUTH CENTRAL												
Kentucky.....	12	16	18	5	5	5	5	14	14	7	2	
Tennessee.....	16	8	27	30	17	14	8	18	6	2	1	
Alabama.....	11	39	27	61	42	42	25	3	5	3	0	
Mississippi ¹	12	17	17				0		5	1	0	
WEST SOUTH CENTRAL												
Arkansas.....	5	19	19	11	31	41	2	2	2	0	0	
Louisiana.....	6	14	14	3	2	2	2	0	1	5	0	
Oklahoma.....	5	15	19	17	22	33	14	1	1	1	0	
Texas.....	46	64	64	638	602	271	34	18	18	9	0	
MOUNTAIN												
Montana.....	1	0	0	4	4	7	57	11	19	0	0	
Idaho.....	0	0	0				0	28	27	0	0	
Wyoming.....	0	0	0	4	45	1	7	4	4	0	0	
Colorado.....	5	11	7	21	88	13	32	12	21	1	0	
New Mexico.....	0	1	1			1	1	1	6	0	0	
Arizona.....	2	4	4	113	26	57	8	4	4	2	0	
Utah ¹	0	0	0		3	3	6	191	10	0	0	
Nevada.....	0	0			5		9	6		1	0	
PACIFIC												
Washington.....	3	6	5		3		26	205	20	4	3	
Oregon.....	0	1	1	17	17	15	22	89	19	5	3	
California.....	35	27	18	22	27	27	53	40	149	7	2	
Total.....	403	619	633	1,429	1,576	1,065	3,162	1,771	1,750	193	59	
44 weeks.....	11,115	12,408	12,662	92,654	91,272	157,887	554,188	476,152	476,152	15,573	2,970	
											1,735	

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended November 6, 1943, and comparison with corresponding week of 1942 and 5-year median—Con.

Division and State	Pollomyelitis			Scarlet fever			Smallpox			Typhoid and paratyphoid fever ¹		
	Week ended		Median 1938-42	Week ended		Median 1938-42	Week ended		Median 1938-42	Week ended		Median 1938-42
	Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942		Nov. 6, 1943	Nov. 7, 1942	
NEW ENGLAND												
Maine.....	0	0	0	19	8	8	0	0	0	0	0	1
New Hampshire.....	2	2	0	9	12	2	0	0	0	0	0	0
Vermont.....	0	1	0	8	2	3	0	0	0	0	0	0
Massachusetts.....	8	0	2	140	182	80	0	0	0	3	7	2
Rhode Island.....	2	0	0	9	1	4	0	0	0	1	1	0
Connecticut.....	5	8	0	30	30	30	0	0	0	1	0	2
MIDDLE ATLANTIC												
New York.....	16	10	10	213	181	178	0	0	0	3	7	9
New Jersey.....	2	4	4	48	62	62	0	0	0	2	0	3
Pennsylvania.....	4	1	8	183	166	166	0	0	0	2	8	11
EAST NORTH CENTRAL												
Ohio.....	2	3	9	290	233	227	0	0	0	2	6	12
Indiana.....	1	2	2	72	42	51	1	2	2	1	2	2
Illinois.....	23	20	20	127	186	202	0	0	2	1	2	3
Michigan ²	7	0	11	118	66	131	1	0	1	2	3	3
Wisconsin.....	8	4	4	152	179	125	0	0	0	1	0	0
WEST NORTH CENTRAL												
Minnesota.....	7	1	5	84	69	68	0	0	0	0	3	1
Iowa.....	2	2	2	61	55	55	1	1	1	0	0	2
Missouri.....	2	4	1	46	48	52	0	1	1	2	5	5
North Dakota.....	1	0	0	14	10	12	0	0	1	0	0	1
South Dakota.....	1	2	1	19	38	18	1	0	1	0	0	0
Nebraska.....	3	5	4	23	15	15	0	0	0	0	0	0
Kansas.....	8	4	2	80	49	60	2	0	1	1	0	2
SOUTH ATLANTIC												
Delaware.....	0	0	0	2	6	6	0	0	0	0	0	0
Maryland ³	0	0	1	54	56	41	0	0	0	1	5	5
District of Columbia.....	0	0	0	9	14	10	0	0	0	0	0	1
Virginia.....	1	1	1	72	88	50	0	0	0	11	1	5
West Virginia.....	1	0	2	70	49	74	0	0	0	0	3	5
North Carolina.....	1	1	1	159	135	96	0	0	0	0	6	5
South Carolina.....	2	0	0	11	12	21	0	0	0	2	2	5
Georgia.....	0	0	1	30	41	30	0	0	0	9	1	7
Florida.....	1	1	1	13	7	7	0	0	0	6	3	2
EAST SOUTH CENTRAL												
Kentucky.....	2	2	5	68	64	64	0	0	0	1	5	12
Tennessee.....	0	0	0	59	59	59	0	0	0	1	1	7
Alabama.....	0	2	1	27	39	39	0	0	0	0	2	4
Mississippi ⁴	0	2	0	14	24	14	0	0	0	3	1	1
WEST SOUTH CENTRAL												
Arkansas.....	0	3	2	8	11	14	0	0	1	1	2	9
Louisiana.....	3	2	1	8	9	8	0	0	0	1	4	5
Oklahoma.....	12	0	1	55	35	23	0	1	2	7	12	9
Texas.....	12	10	4	48	38	37	1	1	1	9	6	9
MOUNTAIN												
Montana.....	0	0	0	9	9	25	0	0	0	3	1	1
Idaho.....	0	0	0	16	4	10	0	0	0	0	0	2
Wyoming.....	0	0	0	6	0	5	0	0	0	0	0	0
Colorado.....	8	2	2	27	31	31	0	0	1	2	1	1
New Mexico.....	2	0	0	3	3	4	0	0	0	1	3	3
Arizona.....	1	0	0	27	2	2	0	0	0	0	2	2
Utah ⁵	15	0	3	29	6	6	0	0	0	0	1	1
Nevada.....	0	0	0	2	1	0	0	0	0	0	0	0
PACIFIC												
Washington.....	15	3	1	100	39	38	0	0	0	1	0	1
Oregon.....	18	0	2	41	6	12	0	0	0	0	1	3
California.....	59	8	8	148	134	134	0	0	1	2	3	3
Total.....	259	105	207	2,860	2,556	2,556	7	6	25	83	110	182
44 weeks.....	11,379	3,624	6,452	116,334	105,407	133,540	655	689	2,114	4,910	6,111	8,581

See footnotes at end of table.

Telegraphic morbidity reports from State health officers for the week ended November 6, 1943, and comparison with corresponding week of 1942 and 5-year median—Con.

Division and State	Whooping cough			Week ended November 6, 1943								
	Week ended		Median 1938-42	Anthrax	Dysentery			Encephalitis, infectious	Leprosy	Rocky Mt. spotted fever	Tularaemia	Typhus fever
	Nov. 6, 1943	Nov. 7, 1942			Amebic	Bacillary	Un-specified					
NEW ENGLAND												
Maine.....	33	50	27	0	0	0	0	0	0	0	0	0
New Hampshire.....	3	0	0	0	0	0	0	0	0	0	0	0
Vermont.....	29	22	22	0	0	0	0	0	0	0	0	1
Massachusetts.....	98	170	168	0	0	4	0	0	0	0	0	0
Rhode Island.....	35	24	20	0	0	0	0	0	0	0	0	0
Connecticut.....	65	80	80	0	0	2	0	0	0	0	0	0
MIDDLE ATLANTIC												
New York.....	254	405	426	0	0	25	0	0	0	0	0	0
New Jersey.....	81	158	153	1	1	1	0	0	0	0	0	0
Pennsylvania.....	167	334	330	1	0	6	0	0	0	0	0	0
EAST NORTH CENTRAL												
Ohio.....	116	124	131	0	0	1	0	0	0	0	0	0
Indiana.....	28	29	19	0	0	0	2	0	0	0	0	0
Illinois.....	130	217	173	0	0	1	0	0	0	0	0	0
Michigan ¹	122	155	192	0	0	7	0	0	0	0	0	0
Wisconsin.....	193	151	174	0	0	0	0	0	0	0	2	0
WEST NORTH CENTRAL												
Minnesota.....	53	40	66	0	1	0	1	0	0	0	0	0
Iowa.....	35	11	20	0	0	0	0	0	0	0	0	0
Missouri.....	13	9	23	0	0	0	0	0	0	0	0	0
North Dakota.....	6	15	15	0	0	0	0	0	0	0	0	0
South Dakota.....	5	9	6	0	0	0	0	0	0	0	0	0
Nebraska.....	13	3	3	0	0	0	0	0	0	0	0	0
Kansas.....	35	30	30	0	0	1	0	1	0	0	1	0
SOUTH ATLANTIC												
Delaware.....	4	7	7	0	0	0	0	0	0	0	0	0
Maryland ²	34	81	37	0	0	0	13	1	0	0	0	0
District of Columbia.....	6	7	11	0	0	0	0	0	0	0	0	0
Virginia.....	101	44	44	0	0	0	46	0	0	1	1	6
West Virginia.....	16	12	22	0	0	0	0	0	0	0	0	0
North Carolina.....	184	63	103	0	0	0	0	0	0	0	2	4
South Carolina.....	51	30	37	0	0	0	0	0	0	0	0	5
Georgia.....	11	16	16	0	1	2	0	0	0	0	0	34
Florida.....	27	4	10	0	5	2	0	2	0	0	1	8
EAST SOUTH CENTRAL												
Kentucky.....	63	30	64	0	0	1	0	0	0	0	1	0
Tennessee.....	29	14	22	0	1	0	4	0	0	0	1	2
Alabama.....	0	28	19	0	0	0	0	0	0	0	0	25
Mississippi ³				0	0	0	0	0	0	0	2	8
WEST SOUTH CENTRAL												
Arkansas.....	13	30	21	0	3	2	0	0	0	0	1	0
Louisiana.....	2	3	6	0	1	2	0	0	0	0	0	11
Oklahoma.....	1	0	1	0	0	0	0	0	0	0	0	0
Texas.....	44	77	77	0	14	180	0	0	0	0	1	24
MOUNTAIN												
Montana.....	12	7	7	0	0	0	0	0	0	0	4	0
Idaho.....	8	1	1	0	0	0	0	0	0	0	0	0
Wyoming.....	10	17	2	0	0	0	0	0	0	0	0	0
Colorado.....	40	14	25	0	0	0	0	0	0	0	0	0
New Mexico.....	0	8	10	0	0	4	0	0	0	0	0	0
Arizona.....	11	2	8	0	0	0	16	0	0	0	0	0
Utah ³	12	11	20	0	0	0	0	0	0	0	0	0
Nevada.....	2	1		0	0	0	0	0	0	0	0	0
PACIFIC												
Washington.....	63	13	50	0	0	0	0	0	0	0	0	0
Oregon.....	40	3	8	0	0	0	0	0	0	1	0	0
California.....	81	245	185	0	2	11	0	1	0	0	0	0
Total	2,379	2,804	3,291	2	29	255	82	5	0	2	17	128
44 weeks	159,207	152,531	152,531	58	1,808	14,237	3,746	597	24	429	699	3,716
44 weeks, 1942				71	1,025	11,006	5,999	500	42	449	750	3,114

¹ New York City only.

² Period ended earlier than Saturday.

³ Including paratyphoid fever cases reported separately as follows: Massachusetts, 3; Connecticut 1; Michigan, 1; Virginia, 6; Georgia, 2; Florida, 6; Texas, 1.

WEEKLY REPORTS FROM CITIES

City reports for week ended October 23, 1943

This table lists the reports from 87 cities of more than 10,000 population distributed throughout the United States, and represents a cross section of the current urban incidence of the diseases included in the table.

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Poliomylitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
NEW ENGLAND												
Maine:												
Portland.....	0	0	0	0	1	1	3	0	3	0	0	1
New Hampshire:												
Concord.....	0	0	0	0	0	0	1	0	0	0	0	0
Vermont:												
Barre.....	0	0	0	0	0	0	0	0	1	0	0	0
Massachusetts:												
Boston.....	0	0	0	0	0	9	10	3	23	0	1	20
Fall River.....	0	0	0	0	0	0	1	1	2	0	0	1
Springfield.....	0	0	0	0	0	0	3	0	9	0	0	5
Worcester.....	0	0	0	0	1	1	4	0	28	0	0	9
Rhode Island:												
Providence.....	0	0	0	0	18	3	1	2	1	0	1	29
Connecticut:												
Bridgeport.....	0	0	0	0	0	0	0	1	3	0	0	0
Hartford.....	0	0	0	0	0	0	1	2	4	0	0	2
New Haven.....	0	0	0	0	0	0	0	0	3	0	0	0
MIDDLE ATLANTIC												
New York:												
Buffalo.....	1	0	1	1	1	1	2	6	3	0	1	2
New York.....	7	2	6	68	30	64	14	97	0	0	3	69
Rochester.....	0	0	0	0	0	2	7	0	6	0	0	12
Syracuse.....	0	0	0	0	0	2	3	0	1	0	0	13
New Jersey:												
Camden.....	0	0	1	0	0	1	1	0	2	0	0	0
Newark.....	0	0	1	0	3	1	5	2	8	0	1	21
Trenton.....	0	0	0	0	1	0	1	0	2	0	2	3
Pennsylvania:												
Philadelphia.....	2	0	2	1	7	6	25	0	21	0	1	39
Pittsburgh.....	0	0	2	1	20	3	17	0	14	0	0	5
Reading.....	0	0	0	0	1	0	0	0	0	0	0	0
EAST NORTH CENTRAL												
Ohio:												
Cincinnati.....	1	0	0	0	19	1	4	0	27	0	0	2
Cleveland.....	0	0	0	0	1	1	10	2	39	0	2	20
Columbus.....	1	0	0	0	7	0	1	0	16	0	0	4
Indiana:												
Fort Wayne.....	1	0	0	0	1	0	0	0	1	0	0	0
Indianapolis.....	3	0	0	0	0	1	4	1	17	0	0	13
South Bend.....	0	0	0	0	9	0	0	0	0	0	0	0
Terre Haute.....	0	0	0	0	1	0	3	0	0	0	0	0
Illinois:												
Chicago.....	1	0	2	1	3	5	20	26	36	0	0	49
Springfield.....	0	0	0	0	1	0	1	0	1	0	0	0
Michigan:												
Detroit.....	6	0	1	5	2	14	3	29	0	0	0	31
Flint.....	0	0	0	1	0	0	0	3	0	0	0	4
Grand Rapids.....	0	0	0	3	0	0	1	3	0	0	0	2
Wisconsin:												
Kenosha.....	0	0	0	2	1	0	0	0	3	0	0	0
Milwaukee.....	0	0	0	6	0	1	0	0	33	0	0	11
Racine.....	0	0	0	4	0	0	0	0	10	0	0	27
Superior.....	0	0	0	200	0	0	0	0	0	0	0	2
WEST NORTH CENTRAL												
Minnesota:												
Duluth.....	0	0	0	4	0	1	0	0	5	0	0	14
Minneapolis.....	6	0	0	12	1	2	5	15	0	0	0	0
St. Paul.....	3	0	0	16	1	8	0	6	0	0	0	16
Missouri:												
Kansas City.....	0	0	0	1	2	9	0	11	0	0	0	2
St. Joseph.....	0	0	0	0	0	0	0	4	0	0	0	0
St. Louis.....	1	0	2	0	1	2	12	0	3	0	0	9

City reports for week ended October 23, 1943—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Polymyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
WEST NORTH CENTRAL—continued												
Nebraska:												
Omaha.....	1	0	0	0	1	0	3	3	18	0	0	1
Kansas:												
Topeka.....	0	0	0	0	0	0	0	0	1	0	0	10
Wichita.....	0	0	0	0	0	0	1	0	5	0	0	2
SOUTH ATLANTIC												
Delaware:												
Wilmington.....	0	0	0	0	0	1	0	0	1	0	0	0
Maryland:												
Baltimore.....	2	0	2	2	3	4	15	0	9	0	0	38
Cumberland.....	0	0	0	0	0	0	0	0	2	0	0	0
Frederick.....	0	0	0	0	0	0	1	0	0	0	0	0
District of Columbia:												
Washington.....	0	0	0	0	1	4	12	0	15	0	0	2
Virginia:												
Lynchburg.....	1	0	0	0	42	0	0	0	0	0	0	18
Richmond.....	0	0	0	0	5	3	1	0	3	0	0	0
Roanoke.....	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia:												
Charleston.....	0	0	0	0	3	0	0	0	2	0	0	0
Wheeling.....	0	0	0	0	0	1	1	0	2	0	0	3
North Carolina:												
Winston-Salem.....	1	0	0	0	0	0	0	0	4	0	0	3
South Carolina:												
Charleston.....	1	0	5	0	0	0	1	0	1	0	0	0
Georgia:												
Atlanta.....	0	0	6	0	0	0	2	0	3	0	0	0
Brunswick.....	1	0	0	0	2	0	0	0	0	0	0	0
Savannah.....	0	0	0	0	0	0	2	0	2	0	0	0
Florida:												
Tampa.....	0	0	0	0	0	0	1	0	0	0	0	0
EAST SOUTH CENTRAL												
Tennessee:												
Memphis.....	0	0	0	2	0	1	0	0	1	0	1	6
Nashville.....	0	0	0	0	0	0	2	0	4	0	0	7
Alabama:												
Birmingham.....	3	0	7	0	2	0	2	0	1	0	0	1
Mobile.....	0	0	0	0	0	0	3	0	1	0	0	0
WEST SOUTH CENTRAL												
Arkansas:												
Little Rock.....	0	0	0	0	0	0	1	0	0	0	0	0
Louisiana:												
New Orleans.....	1	0	0	0	0	1	7	2	3	0	1	0
Shreveport.....	0	0	0	0	0	0	6	0	0	0	0	0
Texas:												
Dallas.....	0	0	0	0	0	0	3	0	2	0	1	0
Galveston.....	0	0	0	0	0	0	1	0	0	0	0	0
Houston.....	2	1	0	2	0	0	7	1	1	0	1	1
San Antonio.....	2	0	0	0	1	0	2	0	0	0	0	1
MOUNTAIN												
Montana:												
Billings.....	0	0	0	0	1	0	0	0	0	0	0	0
Great Falls.....	0	0	0	0	19	0	0	0	2	0	0	0
Helena.....	0	0	0	0	0	0	0	0	0	0	0	0
Missoula.....	0	0	0	0	0	0	0	0	1	0	0	0
Idaho:												
Boise.....	0	0	0	0	0	0	0	0	1	0	0	0
Colorado:												
Denver.....	0	0	6	0	1	0	8	2	3	0	0	33
Pueblo.....	0	0	0	0	0	0	0	0	2	0	0	3
Utah:												
Salt Lake City.....	0	0	0	0	0	0	1	2	4	0	0	5
PACIFIC												
Washington:												
Seattle.....	4	0	0	0	2	0	5	6	3	0	0	34
Spokane.....	2	0	0	0	2	0	2	0	10	0	0	2
Tacoma.....	0	0	0	0	2	0	1	0	2	0	0	0

City reports for week ended October 23, 1943—Continued

	Diphtheria cases	Encephalitis, infectious, cases	Influenza		Measles cases	Meningitis, meningococcus, cases	Pneumonia deaths	Pollomyelitis cases	Scarlet fever cases	Smallpox cases	Typhoid and paratyphoid fever cases	Whooping cough cases
			Cases	Deaths								
PACIFIC—continued												
California:												
Los Angeles.....	15	0	3	0	5	2	2	11	10	0	2	11
Sacramento.....	1	1	0	0	1	0	1	1	2	0	0	0
San Francisco.....	0	0	0	0	0	1	5	13	0	0	0	8
Total.....	70	4	44	10	512	95	333	110	614	0	18	626
Corresponding week, 1942.....	89	2	76	22	273	28	326	31	569	2	27	1,012
Average, 1938-42.....	107	-----	68	116	318	-----	287	-----	537	1	33	1,034

Anthrax.—Cases: Philadelphia, 1.

Dysentery, amebic.—Cases: San Francisco, 1.

Dysentery, bacillary.—Cases: Buffalo, 14; New York, 10; Philadelphia, 1; Chicago, 2; Detroit, 6; St. Louis, 2; Baltimore, 6; Charleston, S. C., 17; Nashville, 4; Los Angeles, 6.

Dysentery, unspecified.—Cases: Pittsburgh, 1; Baltimore, 2; Richmond, 1; San Antonio, 3.

Typhus fever.—Cases: Winston-Salem, 1; Charleston, S. C., 3; Atlanta, 11; Savannah, 3; Tampa, 1; Nashville, 3; Birmingham, 3; New Orleans, 2; Shreveport, 1; Dallas, 1; Houston, 1.

13-year average, 1940-42.

25-year median.

Rates (annual basis) per 100,000 population, by geographic groups, for the 87 cities in the preceding table (estimated population, 1942, 34,648,700)

	Diphtheria case rates	Encephalitis, infectious, case rates	Influenza		Measles case rates	Meningitis, meningococcus, case rates	Pneumonia death rates	Pollomyelitis case rates	Scarlet fever case rates	Smallpox case rates	Typhoid and paratyphoid fever case rates	Whooping cough case rates
			Case rates	Death rates								
New England.....	0.0	0.0	0.0	0.0	49.7	34.8	59.6	22.4	191.3	0.0	5.0	166
Middle Atlantic.....	4.5	0.9	4.9	1.8	44.6	20.5	55.3	9.8	68.7	0.0	3.6	73
East North Central.....	7.6	0.0	1.2	1.2	153.6	6.4	33.9	19.3	127.3	0.0	1.2	96
West North Central.....	21.8	0.0	4.0	0.0	69.2	11.9	71.2	15.8	134.5	0.0	0.0	107
South Atlantic.....	10.4	0.0	22.6	3.5	97.2	22.6	62.5	0.0	76.4	0.0	0.0	111
East South Central.....	17.8	0.0	41.6	11.9	11.9	5.9	41.6	0.0	41.6	0.0	5.9	83
West South Central.....	14.7	2.9	0.0	0.0	8.8	2.9	79.2	8.8	17.6	0.0	8.8	6
Mountain.....	0.0	0.0	48.2	0.0	168.8	0.0	32.2	32.2	104.5	0.0	0.0	330
Pacific.....	38.4	1.7	5.2	0.0	21.0	5.2	29.7	54.2	47.2	0.0	3.5	96
Total.....	10.5	0.6	6.6	1.5	77.1	14.3	50.1	16.6	92.4	0.0	2.7	94

PLAGUE INFECTION IN SISKIYOU COUNTY, CALIF.

Plague infection has been reported proved in pools of fleas from ground squirrels, *C. douglasii*, collected Sept. 27, 1943, in Siskiyou County, Calif., as follows: 66 fleas from 5 ground squirrels taken from a ranch 2½ miles north and 2 miles west of Yreka, and 58 fleas from 4 ground squirrels taken from the Montague Air Field, 3 miles east and 3 miles north of Montague.

TERRITORIES AND POSSESSIONS

Hawaii Territory

Honolulu—*Dengue fever*.—Up to October 31, 1943, a total of 849 cases of dengue fever has been reported in Honolulu, Hawaii Territory.

FOREIGN REPORTS

CANADA

Provinces—Communicable diseases—Week ended October 9, 1943.—During the week ended October 9, 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 Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia	Total
Chickenpox.....		7	1	51	101	12	16	12	42	242
Diphtheria.....		18	3	39		8	1		1	70
Dysentery (bacillary).....				4						4
Encephalitis, infectious.....									1	1
German measles.....				1	5	1	1	7	10	25
Influenza.....		10	2		2	5			6	25
Measles.....		10	2	107	65	26	5	10	17	242
Meningitis, meningococcus.....		1		6	3		1			11
Mumps.....		10		11	42	15	9	6	26	119
Poliomyelitis.....				12	7	3	6	3		31
Scarlet fever.....		5	7	72	63	27	20	18	12	224
Tuberculosis (all forms).....			9	118	61	10		3	22	223
Typhoid and paratyphoid fever.....				30	3				1	34
Undulant fever.....					4					4
Whooping cough.....		15		82	161	7	21	32	17	335

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-named 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 of each month.

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

Plague

Indochina—Cochinchina.—Plague has been reported in Cochinchina, Indochina, as follows: September 1–10, 1943, 5 cases; September 11–20, 1943, 1 case; October 1–10, 1943, 1 case.

Peru.—For the month of September 1943, 1 case of plague with 1 death was reported in Libertad Department, and 2 cases of plague were reported in Lima Department, Peru.

Smallpox

Basutoland.—During the month of June 1943, 16 cases of smallpox were reported in Basutoland.

Indochina.—Smallpox has been reported in Indochina as follows: September 1–10, 1943, 94 cases; September 11–20, 1943, 108 cases; October 1–10, 1943, 73 cases.

Mauritania.—For the period September 11–20, 1943, 13 cases of smallpox were reported in Mauritania, and for the week ended October 9, 1943, 13 cases also were reported.

Niger Territory.—During the week ended October 9, 1943, 39 cases of smallpox were reported in Niger Territory.

Sudan (French).—During the week ended October 9, 1943, 46 cases of smallpox were reported in French Sudan.

Typhus Fever

Bulgaria.—For the period September 9–15, 1943, 4 cases of typhus fever were reported in Bulgaria.

Hungary.—Typhus fever has been reported in Hungary as follows: Week ended September 25, 1943, 10 cases; week ended October 2, 7 cases; week ended October 9, 12 cases.

Palestine.—During the week ended October 9, 1943, 15 cases of typhus fever were reported in Palestine.

Rumania.—Typhus fever has been reported in Rumania as follows: Week ended October 9, 1943, 30 cases; week ended October 16, 28 cases; week ended October 23, 37 cases.

Slovakia.—Typhus fever has been reported in Slovakia as follows: Week ended September 25, 1943, 11 cases; week ended October 2, 27 cases; week ended October 9, 27 cases.

Spain.—During the week ended August 14, 1943, 2 cases of typhus fever were reported in Spain, and for the period August 15–28, 12 cases were reported.

Union of South Africa.—During the month of June 1943, 292 cases of typhus fever were reported in the Union of South Africa.

Yellow Fever

Dahomey—Djougou District.—On September 3, 1943, 2 cases of yellow fever were reported in Djougou District, Dahomey.

COURT DECISION ON PUBLIC HEALTH

State sanitary code amendment defining milk products held invalid as applied to certain product.—(New York Court of Appeals; *Aerated Products Co. of Buffalo v. Godfrey, Com'r of Health*, 48 N. E. 2d 275; decided March 4, 1943.) The plaintiff, a New York corporation, was licensed by an Ohio corporation to manufacture and sell "Instant Whip." This product was made by a patented process and consisted of pasteurized cream, sugar, and vanilla. Nitrous oxide gas was introduced into this mixture, thus creating the quality of foaminess which characterizes whipped cream. The plaintiff held a license issued by the State Commissioner of Agriculture and Markets of New York authorizing it to purchase cream for purposes of manufacture only, and it conformed strictly with the sanitary regulations of such commissioner relating, with respect to "Instant Whip," to buildings where manufactured, persons having contact during manufacture, equipment used in manufacture, containers in which shipped, and premises and equipment where sold. In 1939 the State sanitary code was amended by adding to the definition of "milk products" the words "cream to which any substance has been added and for use in fluid state or whipped."

The plaintiff instituted an action for a declaratory judgment and the determination of the New York Court of Appeals was that the product in question was not a milk product as defined in the sanitary code and accordingly was not subject to regulation under the public health law. It was conceded that the sanitary code amendment was made to bring the plaintiff's product within the definition of a milk product and the appellate court said that that concession "when considered against the background of facts disclosed by material findings by the courts below, which we may not disregard, leads us to conclude that the amendment here in question as applied to the manufacture, sale and distribution of appellant's product 'Instant Whip,' is unreasonable, discriminatory and arbitrary and denies to the appellant the equal protection of the laws and due process of law guaranteed to it as constitutional rights."

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