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THYMOL ADMINISTRATION.

SUBJECTIVE EFFECTS IN 464 ADMINISTRATIONS IN 243 PATIENTS.

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It has recently been possible for us to follow 243 patients during a total of 464 thymol administrations, and to obtain from them statements as to their subjective symptoms. These patients were treated from 1 to 7 times each, according to circumstances. A "treatment" consisted of one or two preliminary doses of Epsom salts (5 and 8 p. m., or in the evening of two succeeding days), thymol the next morning (divided into two doses, at 6 and 8, or in three doses, at 6, 7, and 8), followed by salts at 10.

Cases Nos. 1 to 207, inclusive, were treated at the United States Marine Hospital, Wilmington, N. C.; cases 322 to 537, inclusive, were treated in County Z, on board an Atlantic Coast Line Railroad special car that was fitted up temporarily as a traveling hospital.

Summarized, the results are as follows, the symptoms being arranged in order of their frequency:

Symptoms, etc.	Treatments.	
	Number.	Per cent of total.
Total number of patients, 243.		
Total treatments.....	464	100.0
Ill effect absent.....	259	55.8
Ill effect present (as follows).....	205	44.1
Sickness at the stomach (nausea).....	66	14.2
Weakness.....	62	13.3
Burning in the stomach.....	45	9.7
Dizziness (including also "giddiness," "drunk," "staggy").....	44	9.4
Headache.....	14	3.0
Vomiting.....	13	2.8
Burning in the throat.....	8	1.7
Pain in the stomach ¹	7	1.5
Drowsiness or sleepiness.....	5	1.1
Sick after discharge from treatment.....	3	.64
Chill (apparently not due to treatment).....	1	.21
Dyspnea.....	1	.21
Irregular heart following thymol.....	1	.21
Fainted.....	1	.21
Deaths.....	0	0.

¹ The term "stomach" as commonly used by patients does not necessarily correspond exactly with the anatomical term.

It will be noticed that in 259 treatments (55.8 per cent) the patients made no complaint of any unpleasant effect from the treatment, while in 205 cases (44.1 per cent) the patients did complain.

The most common complaint was of a "sickness at the stomach" (nausea), which was present in 66 treatments (14.2 per cent). In some instances this condition was clearly due to the thymol, but in other instances it seemed to be due to the magnesium sulphate.

The second most frequent complaint was of "weakness," which was noticed in 62 cases (13.3 per cent). This may well have been due to thymol or to salts in some instances, but it seems to have been due in other cases, at least, to the fact that the patients were allowed no breakfast. Usually this weakness was relieved upon eating dinner. By introducing a slight change in the routine we seem to have reduced the complaints. Instead of keeping the patients entirely without food, we allowed them coffee (without milk) at 9.30 a. m. and coffee (without milk) with crackers (no butter) at 10.30. This procedure did not entirely do away with the complaint regarding weakness, but it certainly made the children much more contented.

The third complaint in order of frequency was of a "burning in the stomach" following thymol; this occurred in 45 treatments (9.7 per cent).

Fourth in frequency was a complaint of "dizziness" (including "giddiness," "staggery," "drunk"), this occurring in 44 treatments (9.4 per cent). This was clearly due to thymol in some cases and perhaps to thymol in all cases.

Headache (14 cases=3 per cent) and vomiting (13 cases=2.8 per cent) were almost equally frequent. Just how much of these two symptoms were due to the thymol and how much to the salts and to the other factors is not quite clear.

"Pain in the stomach" or "stomach ache" (7 treatments=1.5 per cent) was an indefinite complaint referable to the entire abdomen and probably due to the salts.

The "drowsiness" or "sleepiness" (5 cases=1.1 per cent) may have been due to loss of sleep in at least some of the cases.

The chill (1 case=0.2 per cent) was probably not connected with the treatment in any way.

Dyspnea and irregularity of the heart (1 case = 0.2 per cent) developed in the same patient, who seemed to have an idiosyncrasy to thymol.

The one (0.2 per cent) case of fainting was in a girl who was particularly susceptible to magnesium sulphate.

In three cases the patients were taken ill after discharge the afternoon of the day of thymol treatment. In one of these cases the illness was due to an attack of malaria. In a second case it followed

an indiscretion of diet. The third case is not clearly explained; possibly it was an after effect of the treatment, possibly it was not connected with the thymol.

Irregularity of symptoms.—Some patients show no ill effect upon the first treatment, but develop symptoms on later treatments. Others show ill effects on first treatment, but none on subsequent treatment. Accordingly, while the behavior of a patient during his first course with thymol may indicate an idiosyncrasy to the drug (as No. 386), it is no necessary criterion of what may occur during subsequent treatments.

Quiet.—In general, it may be stated that patients feel better when they remain in bed as much as possible until dinner time, but some patients take thymol, do not remain in bed, and yet suffer no ill effect.

It is our custom not to discharge patients until all of their subjective symptoms have disappeared. In only two cases has it been deemed necessary to keep the patients overnight, after thymol.

Effects of these symptoms on the lay mind.—Because of various reports regarding the effects of thymol, not a few persons have considerable fear of the drug, and reports of sickness or of death during treatment have undoubtedly been a very important factor in inhibiting some persons from taking the first course of treatment and in inhibiting others from continuing the treatment. Thus the symptoms in question are a factor to be considered in connection with the eradication of hookworm disease.

That a few deaths have occurred during thymol treatment can not be denied. Some of these fatalities were due to following the thymol with castor oil; some were due to a failure to carry out directions; in some instances the details have not as yet been established. Just how important a factor Epsom salts may have been, as in cases of kidney trouble or overdose, for instance, is not determined.

As for the cases of relatively severe illness that have followed hookworm treatment, cases that have made quite an impression on the lay mind, many of these have been due to pure carelessness on the part of the patient or his family, some have undoubtedly been due to the Epsom salts, others doubtless to the thymol.

But whatever the details may be in regard to the cause of the sickness or deaths that have occurred, the fact remains that they have occurred and that in a small percentage of instances they will occur in the future.

The more we come in contact with patients and see how the light cases especially, and even many severe cases, avoid treatment, the more thoroughly convinced we are that unless the present medical work is followed by redoubled efforts to improve the sanitation, a considerable portion of our efforts thus far will have resulted in only

temporary benefit. We would not be interpreted as saying one word against the medical side of this campaign—the work is good, the results are excellent and as good as can be expected—but no effort should be spared to warn the public that thymol and salts alone, without the addition of a sanitary privy, will not eradicate hookworm disease.

Our interpretation of the present status is that the laity to-day has far too much faith in drugs and far too little knowledge of privies.

DETAILS OF CASES.

The details of the 461 treatments taken as basis for the present paper are as follows:

1. The following 97 patients, representing a total of 161 treatments, did not complain of any ill effects:

(a) Treated once:

No.¹ 88¹-m¹-5. ?y¹-7. 5 g.¹
 No. 93-m-7. ?y-15 g.
 No. 97-m-7. ?y-15 g.
 No. 172-m-7. ?y-15 g.
 No. 508-m-7. ?y-5 g.
 No. 511-f-8. 2y-7.5 g.
 No. 158-m-9. ?y-15 g.
 No. 153-m-9. ?y-20 g.
 No. 509-m-9. ?y-7.5 g.
 No. 512-f-9. 3y-10 g.
 No. 51-m-10. ?y-5 g.
 No. 510-m-10. ?y-7.5 g.
 No. 379-f-10. 5y-10 g.
 No. 383-f-10. 9y-12.5 g.
 No. 170-m-11. ?y-25 g.
 No. 516-f-11. ?y-12.5 g.
 No. 344-m-11. ?y-10 g.
 No. 398-m-11. 8y-12.5 g.
 No. 178-m-11. ?y-15 g.
 No. 109-m-12. ?y-25 g.
 No. 157-m-12. ?y-25 g.
 No. 500-m-12. ?y-12.5 g.
 No. 501-m-12. ?y-15 g.
 No. 192-m-12. ?y-30 g.
 No. 163-m-13. ?y-20 g.
 No. 499-m-13. ?y-12.5 g.
 No. 502-m-13. ?y-20 g.
 No. 119-m-14. ?y-20 g.
 No. 9-m-14. ?y-24 g.
 No. 55-m-14. ?y-25 g.
 No. 13-m-14. ?y-30 g.
 No. 513-m-14. ?y-20 g.

(a) Treated once—Continued.

No. 526-m-14. ?y-15 g.
 No. 527-m-14. ?y-25 g.
 No. 503-m-14. ?y-25 g.
 No. 191-m-14. ?y-25 g.
 No. 519-f-14. 5y-20 g.
 No. 56-m-15. ?y-20 g.
 No. 6-m-15. ?y-30 g.
 No. 518-f-15. 8y-20 g.
 No. 5-m-16. ?y-30 g.
 No. 7-m-16. ?y-30 g.²
 No. 57-m-16. ?y-30 g.
 No. 30-m-17. ?y-48 g.
 No. 517-m-17. ?y-30 g.
 No. 68-m-18. ?y-40 g.
 No. 182-m-17. ?y-45 g.
 No. 31-m-19. ?y-45 g.
 No. 16-m-19. ?y-60 g.
 No. 21-m-20. ?y-45 g.
 No. 52-m-20. ?y-45 g.
 No. 10-m-20. ?y-60 g.
 No. 204-m-22. ?y-40 g.
 No. 207-m-23. ?y-50 g.
 No. 70-m-24. ?y-60 g.
 No. 514-f-27. ?y-40 g.

(b) Treated twice:

No. 521-f-4. ?y-4 g.-5 g.
 No. 522-m-6. ?y-5 g.-7.5 g.
 No. 165-m-8. 0y-10 g.-15 g.
 No. 342-m-9. 9y-10 g.-12.5 g.
 No. 474-m-10. 1y-7.5 g.-15 g.
 No. 413-f-10. 9y-10 g.-12.5 g.
 No. 8-m-10. ?y-15 g.-11. ?y-25 g.

¹ Abbreviations: No.—case number; m—male; f—female; y—years (in tenths of years when possible); g—grains; min.—minutes; ?—decimal of year not recorded.

² Patient had a chill at 1 p. m., also one two days before, hence apparently not due to treatment.

(b) Treated twice—Continued.

- No. 175-m-11. ?y-11 g.-17.5 g.
 No. 355-m-11. 0y-12.5 g.-15 g.
 No. 79-m-11. ?y-20 g.-20 g.
 No. 494-m-11. 6y-10 g.-15 g.
 No. 362-m-12. ?y-15 g.-10 g.
 No. 524-m-12. ?y-7.5 g.-10 g.
 No. 483-m-12. 0y-15 g.-15 g.
 No. 489-m-12. 5y-20 g.-22.5 g.
 No. 351-m-12. 6y-12.5 g.-20 g.
 No. 395-f-13. 7y-12.5 g.-15 g.
 No. 523-f-15. ?y-15 g.-20 g.
 No. 201-m-16. ?y-30 g.-30 g.
 No. 492-m-17. 2y-25 g.¹-25 g.
 No. 465-m-18. 8y-25 g.-30 g.
 No. 35-m-20. ?y-40 g.-20 g.
 No. 507-f-21. ?y-30 g.-40 g.
 No. 15-m-27. ?y-60 g.-60 g.

(c) Treated three times:

- No. 111-m-10. ?y-20 g.-20 g.-20 g.
 No. 400-m-10 0y-10 g.-15 g.-15 g.
 No. 450-m-10. 1y-7.5 g.-10 g.-12.5 g.
 No. 340-m-10. 5y-12.5 g.-15 g.-15 g.

(c) Treated three times—Continued.

- No. 338-M-11. 1y-10 g.-15 g.-17.5 g.
 No. 458-f-12. 3y-10 g.-10 g.-12.5 g.
 No. 441-m-13. 9y-15 g.-15 g.-20 g.
 No. 438-m-14. 5y-10 g.-15 g.-25 g.
 No. 466-m-14. 6y-10 g.-12.5 g.-17.5 g.
 No. 457-m-15. 5y-20 g.-25 g.-30 g.
 No. 491-f-15. 9y-7.5 g.-12.5 g.-15 g.

(d) Treated four times:

- No. 331-m-9. 5y-10 g.-12.5 g.-15 g.-15 g.
 No. 416-f-10. 1y-12.5 g.-15 g.-15 g.-15 g.
 No. 426-f-11. 4y-7.5 g.-12.5 g.-17.5 g.-17.5 g.
 No. 336-m-12. 0y-10 g.-15 g.-20 g.-20 g.
 No. 443-m-12. 6y-7.5 g.-12.5 g.-12.5 g.-17.5 g.
 No. 504-m-13. 9y-10 g.-15 g.-20 g.-20 g.

2. The following 5 cases, representing a total of 12 treatments, complained of a burning in the throat, but of no other ill effect:

(a) Treated once:

- No. 183-m-20. ?y-20 g. Slight burning for few min. after last thymol.
 No. 143-m-26. ?y-50 g. Burning for about 15 min. after each thymol.

(b) Treated three times:

- No. 464-m-11. 2y-7.5 g. No ill effect.
 10 g. Slight burning after first thymol.
 15 g. No ill effect.
 No. 476-f-13. 1y-10 g. After 1st thymol.
 15 g. No ill effect.
 20 g. No ill effect.

(c) Treated four times:

- No. 345-f-11. 7y-10 g. Slight, for 15 min. after 2d thymol.
 12.5 g. No ill effect.
 15 g. No ill effect.
 15 g. No ill effect.

3. The following 12 cases, representing a total of 18 treatments, complained of a burning in the stomach, but of no other ill effect:

(a) Treated once:

- No. 145-m-11. ?y-25 g. Slight for about 10 minutes after taking thymol in hominy; could not swallow capsules.
 No. 169-m-11. ?y-25 g. For about 10 minutes after each thymol.
 No. 25-m-18. ?y-45 g. Slight for a few minutes after first thymol.
 No. 29-m-21. ?y-60 g. Slight for a few minutes after first thymol.
 No. 65-m-25. ?y-60 g. Slight for a few minutes after each thymol.

¹ This boy is said to have been very weak and sick after a treatment in 1911.

(a) Treated once—Continued.

- No. 22-m-29. ?y-50 g. Severe; began about 30 minutes after second thymol, lasted about 60 minutes; first complained of stomach, then "lower down."
 No. 32-m-38. ?y-60 g. For about 60 minutes after each thymol.
 No. 126-m-48. ?y-50 g. Slight for about 5 minutes after each thymol.

(b) Treated twice:

- No. 74-m-10. ?y-20 g. For about 2 or 3 minutes after each thymol.
 11. ?y-25 g. No ill effect.
 No. 110-m-15. ?y-25 g. Slight for about 10 minutes after each thymol.
 25 g. No ill effect.

(c) Treated three times:

- No. 75-m- 5. ?y-10 g. For few minutes after thymol.
 10 g. Same dose; no ill effect.
 6. ?y-10 g. Same dose; no ill effect.
 No. 188-m-22. ?y-60 g. No ill effect.
 60 g. Burning in stomach.
 60 g. No ill effect.

4. The following 19 cases, representing a total of 27 treatments, complained only of being "sick at the stomach" (nausea).

(a) Treated once:

- No. 515-f-7. ?y-7.5 g. Slightly sick at 11 a. m.; relieved by stool.
 No. 18-m-7. ?y-8 g. Sick for a few minutes after thymol; at 11.30 again sick for a few minutes, ate dinner at noon and felt well.
 No. 202-m-10. ?y-20 g. Sick after each thymol.
 No. 17-m-11. ?y-24 g. Lasted only few minutes at a time during forenoon.
 No. 505-m-12. ?y-15 g. Sick for about 30 minutes.
 No. 50-m-12. ?y-20 g. Slightly sick for few minutes after thymol.
 No. 46-m-13. ?y-20 g. Slightly sick for a few minutes after each thymol.
 No. 136-m-13. ?y-30 g. Slightly sick for a few minutes after each thymol.
 No. 118-m-16. ?y-30 g. Sick for about 10 minutes after thymol.
 No. 99-m-17. ?y-30 g. Sick for about 1 hour after thymol.
 No. 71-m-25. ?y-60 g. Sick for half an hour after each thymol.
 No. 42-m-25. ?y-45 g. Slightly sick after thymol.
 No. 116-m-30. ?y-50 g. Slightly sick for few minutes after thymol.
 No. 64-m-55. ?y-60 g. Slightly sick for few minutes after thymol.

(b) Treated twice:

- No. 473-f-10. 0y-5 g. Sick for few minutes after last thymol.
 5 g. No ill effect.
 No. 506-f-14. ?y-10 g. Sick at stomach after first dose of 10 g. thymol. Later doses omitted.
 20 g. No ill effect.

(c) Treated three times:

- No. 103-m-6. ?y-7.5 g. Slightly sick for few minutes after each thymol.
 10 g. No ill effect.
 10 g. No ill effect.
 No. 66-m-13. ?y-20 g. No ill effect.
 20 g. Sick at 11 a. m.; given 2d dose of salts, sickness soon passed away.
 25 g. Sick for about half an hour after each dose of thymol.
 No. 12-m-14. ?y-24 g. Sick at 11 a. m., ate dinner at noon, sickness disappeared.
 25 g. No ill effect.
 25 g. Sick for about 15 minutes after each thymol.

5. The following 2 cases, representing a total of 2 treatments, complained of stomach ache, but of no other ill effect:

(a) Treated once:

No. 33-m-7. ?y-12 g. "Hurting" in stomach for about 5 minutes after last thymol.

No. 485-f-11. 4y-15 g. Stomach ache 15 minutes after 10 o'clock salts.

6. The following 3 cases, representing a total of 5 treatments, vomited the day of treatment, but they complained of no other ill effect:

(a) Treated once:

No. 520-m-7. ?y-5 g. Vomited part of thymol.

No. 62-m-11. ?y-15 g. Vomited after midday dinner.

(b) Treated three times:

No. 475-m-10. 2y-12.5 g. Vomited part of thymol.

12.5 g. No ill effect.

15 g. No ill effect.

7. The following 12 cases, representing a total of 19 treatments, complained of feeling "dizzy," or "giddy," or "drunk," but of no other ill effect:

(a) Treated once:

No. 89-m-9. ?y-20 g. "Drunk" until noon.

No. 141-m-9. ?y-20 g. Slightly "dizzy" until 11 a. m.; was up playing most of the time.

No. 90-m-12. ?y-30 g. "Giddy" for about 30 minutes after thymol.

No. 498-f-14. ?y-25 g. "Slightly drunk" for short time at 7.30 a. m.; better after coffee.

No. 154-m-15. ?y-30 g. Slightly "dizzy" for about 15 minutes after each thymol.

No. 117-m-18. ?y-40 g. Slightly "dizzy" for a few minutes after thymol.

No. 184-m-19. ?y-45 g. Slightly "dizzy" after 7 a. m. thymol.

No. 26-m-21. ?y-60 g. Rather "drunk" for about 10 minutes after last thymol.

(b) Treated twice:

No. 83-m-18. ?y-50 g. "Giddy" for about an hour; for 1 or 2 minutes everything "became dark," then patient became all right.

50 g. Same dose; no effect.

(c) Treated three times:

No. 405-m-10. 4y-12.5 g. Slightly dizzy; better after coffee.

12.5 g. Dizzy about noon for 10 minutes, then better.

15 g. No ill effect.

No. 27-m-13. ?y-20 g. Slightly "drunk" after 10 o'clock salts for about 5 minutes.

20 g. Same dose; no ill effect.

20 g. Same dose; no ill effect.

No. 94-m-15. ?y-35 g. Slightly dizzy for an hour or more.

40 g. Increased dose; no ill effect.

16. ?y-45 g. No ill effect.

8. The following 32 cases, representing a total of 77 treatments, complained of feeling "weak," but of no other ill effect:

(a) Treated once:

- No. 369-m-9. 2y- 7.5 g. Slightly weak.
 No. 478-f-10. 1y- 7.5 g. Very weak, better after coffee and dinner. Was all right at 2 p. m., but weak again at 2.15.
 No. 488-f-10. 8y-15 g.
 No. 487-f-10. 8y-15 g.
 No. 385-f-11. 3y-17.5 g.
 No. 387-f-11. 7y-15 g. Weak and hungry.
 No. 453-f-11. 9y-12.5 g.
 No. 394-f-11. 9y-15 g. Weak and hungry.
 No. 486-f-12. 4y-20 g.
 No. 193-m-13. ?y-30 g. Weak after morning salts.
 No. 3-m-21. ?y-45 g. Slight weakness until after dinner.
 No. 2-m-24. ?y-45 g. Weak until after dinner.

(b) Treated twice:

- No. 373-f-11. 9y-10 g. Weak after capsules; hungry.
 10 g. Same dose; no complaint.
 No. 448-m-10. 2y-10 g. Weak.
 12.5 g. Higher dose; no complaint.
 No. 361-m-11. 0y-15 g. Slightly weak.
 10 g. No complaint.
 No. 442-f-11. 9y-12.5 g. Slightly weak.
 15 g. No complaint.

(c) Treated three times:

- No. 445-m-9. 9y-12.5 g. Weak.
 12.5 g. Same dose; weak.
 12.5 g. Same dose; weak.
 No. 454-f-10. 4y-12.5 g. No ill effect.
 15 g. Weak.
 15 g. No ill effect.
 No. 44-m-12. ?y-20 g. Slightly weak.
 10 g. No ill effect.
 20 g. No ill effect.
 No. 459-m-12. 1y-7.5 g. Weak.
 12.5 g. Higher dose; no ill effect.
 12.5 g. Higher dose; no ill effect.
 No. 462-m-12. 4y-15 g. No ill effect.
 20 g. Weak.
 22.5 g. Higher dose; no ill effect.
 No. 490-m-12. 6y-20 g. No ill effect.
 22.5 g. Weak.
 22.5 g. No ill effect.
 No. 439-m-13. 5y-15 g. No ill effect.
 20 g. Weak.
 25g. Higher dose; no ill effect.

(d) Treated four times:

- No. 423-f- 9. 8y-12.5 g. No ill effect.
 15 g. Weak.
 15 g. No ill effect.
 15 g. No ill effect.

(d) Treated four times—Continued.

- No. 479-f-10. 0y-7.5 g. Weak.
 12.5 g. Higher dose; no ill effect.
 12.5 g. Higher dose; no ill effect.
 15 g. Higher dose; no ill effect.
- No. 415-f-10. 2y-7.5 g. Slightly weak and hungry.
 12.5 g. Weak.
 15 g. No ill effect.
 15 g. No ill effect.
- No. 442-m-11. 0y-12.5 g. No ill effect.
 15 g. Weak.
 12.5 g. No ill effect.
 15 g. No ill effect.
- No. 396-m-11. 5y-10 g. No ill effect.
 12.5 g. Slightly weak.
 17.5 g. Higher dose; no ill effect.
 17.5 g. Higher dose; no ill effect.
- No. 391-f-11. 9y-15 g. Weak.
 17.5 g. Higher dose; no ill effect.
 17.5 g. Higher dose; no ill effect.
 20 g. Higher dose; no ill effect.
- No. 179-m-12. ?y-15 g. No ill effect.
 25 g. Slightly weak after 10 a. m. salts.
 30 g. No ill effect.
 30 g. No ill effect.
- No. 468-f-12. 5y-10 g. Weak and hungry.
 15 g. Higher dose; no ill effect.
 15 g. Higher dose; no ill effect.
 17.5 g. Higher dose; no ill effect.
- No. 460-m-14. 0y-20 g. No ill effect.
 25 g. Weak.
 20 g. No ill effect.
 25 g. No ill effect.

9. The following 2 cases, representing a total of 2 treatments, complained of headache, but of no other ill effect:

(a) Treated once:

- No. 96-m-10. ?y-15 g. Headache for about 10 minutes after each thymol.
 No. 137-m-25. ?y-50 g. Slight headache during morning, more severe at 11.30 a. m.

10. The following case, representing a total of 4 treatments, complained of burning in the throat and stomach, of being sick at the stomach, and of headache:

(a) Treated four times:

- No. 200-m-19. ?y-45 g. Headache and burning in stomach after thymol, better after coffee; ate too much dinner (rice and corn) and was nauseated, relieved by warm water (vomited).
 45 g. Burning in stomach.
 45 g. Slight burning in throat for a few minutes after 1st thymol.
 45 g. No ill effect.

11. The following case, representing a total of 4 treatments, complained of burning in the throat and of being sick at the stomach:

(a) Treated four times:

- No. 477-f-11. 7y-15 g. Burning in throat after 1st thymol.
 17.5 g. Sick at stomach until salts.
 17.5 g. No ill effect.
 10 g. Sick at stomach after 1st thymol, lasted until salts; 2d and 3d thymols omitted.

12. The following case, representing a total of 2 treatments, complained of burning in the throat and of being weak:

(a) Treated twice:

- No. 388-f-11. 8y-20 g. Weak and hungry.
 20 g. Burning in throat.

13. The following 2 cases, representing a total of 8 treatments, complained of burning in the stomach and of sickness at the stomach:

(a) Treated three times:

- No. 39-m-15. ?y-20 g. Rather sick at stomach for short time after each thymol.
 25 g. No ill effect.
 30 g. Burning for about 10 minutes after each thymol.

(b) Treated five times:

- No. 23-m-10. ?y-12 g. "Felt like wad in neck" after thymol, also burning in stomach for few minutes about 11.
 15 g. Slightly sick at stomach during morning, as salts did not move. Enema at 12 m., with good return.
 12.5 g. Slightly sick at stomach before noon; lasted half hour.
 15 g. Burning in stomach until about noon.
 20 g. Sick at stomach for few minutes after each thymol.

14. The following case, representing a total of 7 treatments, complained of burning in the stomach, pain in the stomach, headache, and weakness:

(a) Treated seven times:

- No. 45-m-11. ?y-15 g. Pain in stomach for 5 to 10 minutes after each thymol.
 15 g. Same dose; no ill effect.
 15 g. Same dose; no ill effect.
 20 g. Burning in stomach for about 10 minutes after each thymol.
 20 g. Pain in stomach for an hour after last thymol.
 12. ?y-25 g. Weak after thymol.
 20 g. Slight headache for about an hour after thymol.

15. The following case, representing a total of 2 treatments, complained of burning in the stomach, sickness at the stomach, of vomiting, of being drowsy or sleepy, and of headache:

(a) Treated twice:

- No. 20-m-17. ?y-45 g. Was very stupid when admitted, complained of being drowsy and sleepy; just before noon, sick at stomach; ate dinner, then vomited, then felt better except for headache, possibly due to malaria.
 50 g. Burning in stomach for about 5 minutes after each thymol.

16. The following 2 cases, representing a total of 8 treatments, complained of a burning in the stomach, a sickness at the stomach, and of dizziness or drunkenness:

(a) Treated twice:

- No. 11-m-13. ?y-24 g. At 11, sick stomach; recovered after noon dinner.
25 g. Slight burning in stomach and drunk feeling in head for about 10 minutes after each thymol.

(b) Treated six times:

- No. 1-m-11. ?y-15 g. At 1 o'clock somewhat sick at stomach; at 2 o'clock all right.
20 g. Increased dose; no ill effect.
12.5 g. Decreased dose; slight burning after thymol; sick at stomach after salts.
22.5 g. Increased dose; no ill effect.
25 g. Increased dose; no ill effect.
30 g. Slightly dizzy and nauseated for about 15 minutes after each thymol.

17. The following case, representing a total of 7 treatments, complained of burning in the stomach, sickness at the stomach, a feeling of being "drunk," and a feeling of weakness:

(a) Treated seven times:

- No. 24-m-12. ?y-30 g. Burning in the stomach for a few minutes after thymol; "drunk" at about 11 a. m.
20 g. Slightly sick at stomach and weak most of the morning; well after dinner.
20 g. No ill effect.
25 g. Sick at stomach upon getting out of bed; better when in bed.
25g. Slightly sick at stomach for about 30 minutes after each thymol.
25 g. Sick at stomach for about 30 minutes after each thymol.
25 g. Burning in stomach for about 10 minutes after each thymol.

18. The following case, representing a total of 4 treatments, complained of a burning in the stomach, a sickness at the stomach, and of feeling drowsy:

(a) Treated four times:

- No. 78-m-17. ?y-25 g. Burning in stomach about 1 minute after each dose; also slightly drowsy after thymol.
25 g. Sick at stomach for about 10 minutes after each thymol.
25 g. Same dose; no ill effect.
25 g. Same dose; no ill effect.

19. The following case, representing 1 treatment, complained of burning in the stomach, of sickness at the stomach, and of weakness:

(a) Treated once:

- No. 144-m-37. ?y-60 g. Burning for about half hour after thymol; nauseated and weak all day; better in afternoon, but still weak.

20. The following case, representing a total of 2 treatments, complained of a burning in the stomach and of vomiting:

(a) Treated twice:

- No. 105-m-11. ?y-20 g. Burning in stomach for about 10 minutes after each thymol; vomited after second thymol.
25 g. Increased dose; no ill effect.

21. The following 14 cases, representing a total of 16 treatments, complained of a burning in the stomach and of giddiness (or feeling "drunk" or "staggery"):

(a) Treated once:

- No. 91-m-10. ?y-20 g. Burning for about 15 minutes after each thymol; giddiness 2 hours.
No. 171-m-11. ?y-25 g. Burning and dizziness for about 5 minutes after each thymol.
No. 69-m-12. ?y-25 g. Burning for a few minutes; "staggery" for about an hour after thymol.
No. 125-m-13. ?y-25 g. Burning and "drunk feeling" for about 15 minutes after first thymol only.
No. 108-m-14. ?y-30 g. Burning for about 10 minutes and slightly dizzy for about 30 minutes after each thymol.
No. 47-m-15. ?y-30 g. Burning and "kind of drunk" for about 5 minutes after each thymol.
No. 58-m-20. ?y-50 g. Slight burning, and drunk feeling for a few minutes after each thymol.
No. 139-m-30. ?y-60 g. Burning for about 10 minutes and slight dizziness for about 30 minutes after each thymol.
No. 80-m-31. ?y-60 g. Burning for about 10 minutes; "drunk" about 15 minutes.
No. 82-m-36. ?y-50 g. Burning for about 5 minutes after each thymol; "swimming in the head" for 2 to 3 hours.
No. 81-m-37. ?y-60 g. Burning and "drunk" feeling for about an hour after each thymol.
No. 53-m-60. ?y-50 g. Burning for about 15 minutes after each thymol; slightly "giddy" until noon.

(b) Treated twice:

- No. 67-m-11. ?y-20 g. No ill effect.
20 g. Slight burning and dizziness for about 10 minutes after each thymol.
No. 104-m-16. ?y-30 g. Burning for about 10 minutes after each thymol.
40 g. Burning and dizziness for about 15 minutes after each thymol.

22. The following case, representing a total of 6 treatments, complained of burning in the stomach, dizziness, and weakness:

(a) Treated six times:

- No. 63-m-16. ?y-10 g. No effect.
15 g. No effect.
25 g. Slight weakness before dinner.
15 g. Slightly dizzy, otherwise no effect.
30 g. Slight weakness, burning in stomach, and dizzy 30 minutes after each thymol.
30 g. No effect.

23. The following 2 cases, representing a total of 3 treatments, complained of burning in the stomach and of headache:

(a) Treated once:

No. 87-m-33. ?y-50 g. Slight burning for about 10 minutes after each thymol; headache all day.

(b) Treated twice:

No. 186-m-7. ?y-10 g. Burning and headache began an hour after 6 a. m. thymol; had difficulty in swallowing capsules.
10 g. No ill effect.

24. The following case, representing a total of 3 treatments, complained of burning in the stomach and of weakness:

(a) Treated three times:

No. 372-f-10. 1y-10 g. Weak and hungry.
15 g. Burning in stomach for 5 minutes after third thymol.
15 g. No ill effect.

25. The following 3 cases, representing a total of 5 treatments, complained of being sick at stomach and they vomited:

(a) Treated once:

No. 134-m-14. ?y-25 g. Slightly sick for about an hour after last thymol; vomited at 2.30 (after dinner).

No. 206-m-19. ?y-50 g. Sick at stomach and vomited at 10.30 a. m.; then received peppermint water and 40 c. c. additional mag. sulph., no further trouble.

(b) Treated three times:

No. 470-f-12. 3y-10 g. Sick after 10 a. m. salts.
15 g. No ill effect.
15 g. Sick after first thymol, lasting all morning; vomited last thymol.

26. The following case, representing a total of 4 treatments, complained of being sick at stomach, of vomiting, of headache, and of weakness:

a) Treated four times:

No. 14-m-14. ?y-30 g. Frontal headache about 11 a. m., gradually wore off about noon.

30 g. Slightly sick at stomach for about half an hour after each thymol.

30 g. Slightly sick at stomach after 10 o'clock salts.

16. ?y-45 g. Vomited part of morning salts; slightly sick at stomach for 15 minutes at 12.30; slight headache.

27. The following case, representing a total of 2 treatments, complained of being sick at the stomach, of vomiting, and of being dizzy and weak:

(a) Treated twice:

No. 140-m-13. ?y-25 g. Sick at stomach until 11 a. m.; dizzy for 15 minutes after each thymol.

30 g. Vomited after second thymol; weak during a. m.

28. The following case, representing a total of 2 treatments, complained of being sick at the stomach, of vomiting, and of being weak:

(a) Treated twice:

- No. 371-f-11. 0y-10 g. Vomited second thymol; omitted third; weak and hungry.
7.5 g. Nauseated at 6 a. m., did not receive thymol until 8; no later ill effect; sickness at 6 a. m. clearly not due to thymol.

29. The following 4 cases, representing a total of 4 treatments, complained of being sick at the stomach and of being dizzy (or "drunk"):

(a) Treated once:

- No. 41-m-23. ?y-60 g. Slightly sick at stomach and "kind of drunk" after thymol, lasted short time only, then all right.
No. 73-m-26. ?y-42.5 g. Dizzy and sick at stomach for few minutes after each thymol.
No. 72-m-28. ?y-50 g. Slightly drunk and sick at stomach for few minutes after each thymol.
No. 34-m-29. ?y-60 g. Drunk feeling short time after thymol. After salts sick at stomach, but did not vomit.

30. The following 2 cases, representing a total of 7 treatments, complained of being sick at the stomach, dizzy, and weak:

(a) Treated three times:

- No. 482-f-14. 9y-22.5 g. Weak after last thymol, otherwise all right.
20 g. Sick at stomach after second thymol, dizzy, weak, omitted third thymol.
17.5 g. Sick at stomach until salts, omitted third thymol. All right at 1 p. m.

(b) Treated four times:

- No. 472-f-12. 0y-10 g. Weak; otherwise all right.
15 g. No effect.
15 g. Sick at stomach and dizzy for 2 hours after second thymol.
5 g. Sick at stomach after first thymol; second and third omitted.

31. The following case, representing a total of 2 treatments, complained of being sick at the stomach and of feeling drowsy and stupid:

(a) Treated twice:

- No. 85-m-19. ?y-40 g. Slightly sick at stomach for few minutes after thymol; very weak.
40 g. Was very stupid all morning and wanted to sleep most of time, but said he felt all right.

32. The following case, representing 1 treatment, complained of being sick at the stomach and of headache:

(a) Treated once:

- No. 95-m-13. ?y-20 g. Headache and sick at stomach for about 10 minutes after each thymol.

33. The following 4 cases, representing a total of 12 treatments, complained of being sick at the stomach and of weakness:

(a) Treated twice:

No. 456-f-16. 2y-25 g. Weak; otherwise no ill effect.
 20 g. Answers very untrustworthy. Says she had stomach ache after evening salts and complained of sickness after second thymol. Third thymol omitted. Conduct does not confirm statements. At 1.20 said she was slightly weak, otherwise all right.

(b) Treated three times:

No. 444-m-10. 1y-10 g. Weak; otherwise no ill effect.
 10 g. Weak; otherwise no ill effect.
 15 g. Says he has felt sick at stomach, but conduct did not confirm statement.
 No. 451-f-11. 1y-12.5 g. Weak and slightly sick at stomach.
 12.5 g. No ill effect.
 15 g. No ill effect.

(c) Treated four times:

No. 469-f-9. 1y-7.5 g. Hungry and weak.
 10 g. No ill effect.
 10 g. No ill effect.
 7.5 g. Sick after first thymol; sickness at stomach after second thymol lasted only short while.

34. The following case, treated twice, complained of being sick at the stomach, of weakness, of dyspnea, and of irregularity of heart. The patient showed an idiosyncrasy to thymol. She was treated twice in 1912 and once in 1911:

(a) Treated twice:

No. 386-f-13. 5y-5 g. Nauseated, dyspnea, weak, heart irregular; omitted second and third thymol.
 4 g. Slightly nauseated before thymol; was given thymol at 8.

35. The following case, representing a total of 3 treatments, complained of stomach ache, headache, and weakness:

(a) Treated three times:

No. 382-f-10. 5y-12.5 g. Weak and hungry.
 15 g. Headache before retiring evening before thymol, but this disappeared with coffee at 9 a. m. Headache after third thymol.
 15 g. Slight stomach ache for a few minutes after salts.

36. The following case, representing a total of 2 treatments, complained of vomiting, drowsiness, and headache; he was stupid before treatment:

(a) Treated twice:

No. 115-m-10. ?y-15 g. Headache a. m., seemed very stupid all a. m.; vomited 12 m.
 15 g. Stupid before thymol; said nothing hurt him, but lay around and wanted to sleep nearly all morning.

37. The following case, representing a total of 4 treatments, vomited and complained of feeling weak:

(a) Treated four times:

- No. 330-m-11. 6y-10 g. "Felt curious all over," weak. Vomited salts at 10 a. m. Salts repeated and retained. Vomited coffee later. All right at 2 p. m.
- 10 g. Weak, otherwise no ill effect.
- 15 g. No ill effect.
- 15 g. No ill effect.

38. The following case, treated twice, complained of feeling dizzy, drunk, and weak:

(a) Treated twice:

- No. 467-f-13. 8y-15 g. Weak, drunk.
- 15 g. Slightly dizzy for a few minutes after second thymol.

39. The following 2 cases, representing a total of 3 treatments, complained of headache and dizziness (drunkenness, etc.):

(a) Treated once:

- No. 92-m-9. 7y-20 g. Slight, until noon.

(b) Treated twice:

- No. 86-m-13. 7y-25 g. Drunk for about 15 minutes; slight headache until noon.
- 25 g. No ill effect.

40. The following case, treated once, complained of headache and weakness:

(a) Treated once:

- No. 437-m-10. 1y-10 g. Slight headache and weakness after thymol; better after coffee.

41. *Special cases.*—The following cases may be classed as special:

No. 452-f-11. 8y-15 g. Weak and hungry.

- 17.5 g. Shortly after 10 a. m. salts, patient complained of feeling somewhat sick at stomach. At noon she seemed fairly well, but weak and somewhat sick at stomach; ate crackers and eggs at noon. From noon on she felt alternately better and worse at times, then vomited her dinner. Soda mint was administered and vomited after about 10 minutes. Rested well until 4 p. m., then seemed alternately better and worse until about 6, when she fainted; at about 6.15 she nearly fainted twice, but revived upon smelling aromatic spirits of ammonia. At 7 received enema of normal salt, 1 pint; at 7.20 was feeling fairly well, but drowsy. Rested fairly well until midnight, when she complained of pain in stomach and she vomited. She then slept naturally until 2 a. m., when she complained of pain in stomach. Then rested fairly well until 6.30 a. m., when she dressed. Vomited, said she felt weak, but was able to walk. For two days she remained rather weak. When seen 7 days later was well.

Patient was a frail, nervous, somewhat hysterical girl, who, according to statements by herself, her mother, father, and brother, is subject to attacks similar to this, especially when hungry. Her mother stated that Epsom salts nearly always made the child ill. The nausea might have been due either to the salts or to the thymol, with the possibilities seemingly in favor of the salts, since she seems to have an idiosyncrasy to salts, and since she consistently denied any feeling of drunkenness or dizziness, or even headache (except momentarily after wrenching to vomit). The weakened condition was doubtless due, in part at least, to lack of food, including refusal to take coffee during morning of treatment.

No. 484-m-8. 8y-12.5 g. Discharged apparently well at 1 p. m.; later taken sick, see below.

10 g. No ill effect.

10 g. No ill effect.

In the first treatment, this boy behaved very badly during the night, talking and playing constantly, and obtaining scarcely any sleep. During the morning of treatment he showed no unfavorable symptom of any kind, and was discharged at 1 p. m., apparently perfectly well.

About 6 p. m. news reached us that the boy was sick. His pulse was 80, regular and full; he seemed very drowsy.

It seems that upon being discharged from treatment, he went to a store and—as was described to us—literally “filled up” with peanut brittle; then he ate soda crackers, canned oysters, and sweet-potato pie. Shortly after eating he had complained of feeling sick, and had cried; he had three more movements of the bowels which he complained burned him; he became drowsy.

Patient stated at 6 that he felt better, but was weak and drowsy. He had been very thirsty, and had taken water twice.

At 6.55 p. m. his pulse was 72, temperature, $97\frac{3}{4}$; says he feels all right, except sleepy.

At 8 p. m., pulse 59; says he feels all right, except weak and hungry. Has had two more small movements. Was now given an alcohol rub and warm blanket, with hot jar at feet.

At 8.40 p. m., pulse 68; boy's mother states that he is very sensitive to Epsom's salts.

At 10 p. m., pulse 72, good, regular.

At 7 a. m., patient felt better after night's sleep.

No. 480-f-10. 7y- 7.5 g. Weak.

10 g. No ill effect.

10 g. Slightly sick at stomach a few minutes after first thymol (5 grains). Discharged apparently well at 1 p. m.

The following day father of the patient called and stated that child complained of pain in the bowels (pointing to regions of transverse colon and stomach); that she is subject to stomach ache, but that this attack seems different; the pain began about 5 to 6 hours after patient was discharged, and continued the next day; she does not feel either dizzy or drunk.

The third day patient was better.

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.

IN CERTAIN STATES AND CITIES.

SMALLPOX.

Wisconsin Report for May, 1913.

Place.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within seven years preceding attack.	Number last vaccinated more than seven years preceding attack.	Number never successfully vaccinated	Vaccination history not obtained or uncertain.
Wisconsin:						
Barron County	30		2	4	23	1
Brown County	30				24	6
Clark County	1					1
Douglas County	7					7
Eau Claire County	2					2
Forest County	10					10
Jefferson County	3					3
Juneau County	1					1
Kenosha County	1				1	
Manitowoc County	1				1	
Marathon County	4					4
Marinette County	1			1		
Milwaukee County	14					14
Pepin County	1					1
Polk County	4					4
Racine County	4					4
Rock County	3					3
Sawyer County	3					3
Shawano County	5		4	1		
Trempealeau County	1				1	
Wood County	17				1	16
Total	143	0	6	6	51	80

SMALLPOX—Continued.

Maryland Report for June, 1913.

Places.	Number of new cases reported during month.	Deaths.	Vaccination history of cases.			
			Number vaccinated within 7 years preceding attack.	Number last vaccinated more than 7 years preceding attack.	Number never successfully vaccinated.	Vaccination history not obtained or uncertain.
Maryland, exclusive of Baltimore city:						
Allegany County—						
Cumberland.....	1				1	
Franklin.....	3				3	
Westernport.....	2				2	
Garrett County—						
Dodson, R. F. D.....	1				1	
Swanton.....	11				11	
Montgomery County—						
Kensington.....	1				1	
Prince Georges—						
Collington.....	1				1	
Total.....	20				20	

Arizona—Nogales.

Acting Asst. Surg. Gustetter, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 1 case of smallpox had been notified in Nogales, Ariz., making a total of 3 cases reported since May 22, 1913.

Indiana—Evansville.

Surg. Clark, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 2 cases of smallpox had been notified in Evansville, Ind., making a total of 845 cases reported since October 1, 1912.

New York—Keesville.

The State Board of Health of New York reported by telegraph July 11, 1913, that one case of smallpox had been notified at Keesville, Clinton County, N. Y.

Oregon—Grand Ronde.

Acting Asst. Surg. Clausius, of the Public Health Service, reported that during the period from June 12 to June 30, 1913, 3 new cases of smallpox had been notified at Grand Ronde Indian Agency, Oreg., making a total of 65 cases reported during the period from April 20 to June 30, 1913.

SMALLPOX—Continued.

Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Arizona (June 1-30):			Virginia—Continued.		
Counties—			Counties—Continued.		
Gila.....	15	.....	Halifax.....	1	.....
Maricopa.....	4	.....	Isle of Wight.....	1	.....
Total.....	19	.....	Mecklenburg.....	8	.....
Connecticut (June 1-30):			Montgomery.....	12	.....
Counties—			Norfolk.....	1	.....
Hartford.....	1	.....	Northampton.....	5	.....
Total.....	1	.....	Powhatan.....	8	.....
Virginia:			Princess Anne.....	8	.....
Counties—			Prince Edward.....	2	.....
Caroline.....	1	.....	Roanoke.....	3	.....
Chesterfield.....	3	.....	Russell.....	1	.....
Franklin.....	2	.....	Sussex.....	7	.....
Giles.....	1	.....	Tazewell.....	1	.....
			Washington.....	1	.....
			Total.....	66	.....

City Reports for Week Ended June 28, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Aurora, Ill.....	4	.....	Montgomery, Ala.....	5	.....
Austin, Tex.....	1	.....	New Orleans, La.....	1	.....
Baltimore, Md.....	1	.....	New York, N. Y.....	1	.....
Binghamton, N. Y.....	1	.....	Niagara Falls, N. Y.....	2	.....
Chicago, Ill.....	1	.....	Norristown, Pa.....	3	.....
Columbus, Ohio.....	2	.....	Oklahoma, Okla.....	7	.....
Danville, Ill.....	1	.....	Plainfield, N. J.....	.....	1
Duluth, Minn.....	7	.....	St. Louis, Mo.....	2	.....
Elmira, N. Y.....	7	.....	South Bethlehem, Pa.....	1	.....
Johnstown, Pa.....	3	.....	Spokane, Wash.....	7	.....
Knoxville, Tenn.....	2	.....	Springfield, Ohio.....	4	1
Los Angeles, Cal.....	6	.....	Toledo, Ohio.....	4	.....
Lowell, Mass.....	24	.....	Washington, D. C.....	4	.....
Milwaukee, Wis.....	2	.....		

TYPHOID FEVER.

Wisconsin Report for May, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Wisconsin:		Wisconsin—Continued.	
Bayfield County.....	11	Marathon County.....	4
Columbia County.....	1	Milwaukee County.....	15
Dane County.....	3	Outagamie County.....	1
Fond du Lac County.....	2	Waupaca County.....	1
Grant County.....	1	Total.....	55
Kenosha County.....	16		

TYPHOID FEVER—Continued.

State Reports for June, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
Maryland, exclusive of Baltimore city:		Maryland—Continued.	
Allegany County—		Queen Anne County—	
Allegany Hospital	4	Centerville	1
Barton	1	Chestertown	1
Cumberland	53	Hayden	2
Lonaconing	1	Ingleside	1
McCool	1	Somerset County—	
Mount Savage	2	Crisfield	1
Narrows Park	1	Easton	3
Westernport	4	Lawsonia	1
Anne Arundel County—		Marion	2
Annapolis	1	Wenona	2
Churchton	1	St. Mary's County—	
Curtis Bay	1	Ridge	1
Deale	1	Washington County—	
Friendship	1	Clearspring	2
Baltimore County, exclusive of Baltimore city	8	Hagerstown	2
Calvert County—		Keedysville	1
Mutual	1	Smithsburg	1
Poplars	4	Wicomico County—	
Port Republic	4	Parsonsburg	2
Willows	4	Pittsville	1
Carroll County—		Worcester County—	
Greenville	1	Berlin	5
Henryton	1	Bishopville	1
Preston	1	Pocomoke City	2
Springfield Hospital	2	Stockton	1
Charles County—		St. Martin	1
Chapel Point	2	Total	153
Dorchester County—		New Jersey:	
Cambridge	7	Atlantic County	1
Salem	1	Bergen County	1
Springdale	2	Burlington County	3
Frederick County—		Camden County	4
Araby	1	Cumberland County	1
Burkittsville	1	Essex County	14
Middletown	1	Gloucester County	4
Garrett County—		Hudson County	6
Oakland	3	Hunterdon County	1
Harford County—		Mercer County	4
Perryman	1	Middlesex County	5
Kent County—		Monmouth County	6
Betterton	1	Morris County	1
Chestertown	1	Passaic County	5
Montgomery County—		Union County	4
Germantown	1	Total	60
Prince George County—			
Coombe	1		
Seat Pleasant	1		

CEREBROSPINAL MENINGITIS.

California—Los Angeles.

Senior Surg. Brooks, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 1 case of cerebrospinal meningitis had been notified in Los Angeles, Cal., making a total of 76 cases reported since January 1, 1913.

California—San Francisco.

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 1 case of cerebrospinal meningitis had been notified in San Francisco, Cal.

CEREBROSPINAL MENINGITIS—Continued.

Wisconsin Report for May, 1913.

The State Board of Health of Wisconsin reported that during the month of May, 1913, 1 case of cerebrospinal meningitis had been notified in Milwaukee County and 1 case in Rock County, Wis.

Cases and Deaths Reported by Cities for Week Ended June 28, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md.....	3	.....	New Orleans, La.....	1	.....
Cincinnati, Ohio.....	1	.....	New York, N. Y.....	11	5
Gloucester, Mass.....	.....	1	Pittsburgh, Pa.....	1	1
Lexington, Ky.....	.....	1	St. Louis, Mo.....	2	2
Los Angeles, Cal.....	4	2	San Francisco, Cal.....	.....	1
Morristown, N. J.....	.....	1			

POLIOMYELITIS (INFANTILE PARALYSIS).

State Reports for June, 1913.

Places.	Number of new cases reported during month.	Places.	Number of new cases reported during month.
New Jersey:		Virginia—Continued.	
Essex County.....	1	Charlotte County.....	1
Hudson County.....	1	Franklin County.....	1
Sussex County.....	1	King and Queen County.....	1
Total.....	3	Montgomery County.....	3
Virginia:		Orange County.....	1
Albemarle County.....	1	Powhatan County.....	1
Campbell County.....	1	Stafford County.....	1
		Total.....	11

California—San Francisco.

Surg. Long, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 1 case of poliomyelitis had been notified in San Francisco, Cal.

Cases and Deaths Reported by Cities for Week Ended June 28, 1913.

During the week ended June 28, 1913, poliomyelitis was reported by cities as follows: Columbus, Ohio, 1 case; Fall River, Mass., 1 case; New Orleans, La., 1 case.

ERYSIPELAS.

Cases and Deaths Reported by Cities for Week Ended June 28, 1913.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Bridgeport, Conn.....	2	.....	Pittsburgh, Pa.....	2	1
Buffalo, N. Y.....	4	2	Reading, Pa.....	1	.....
Chicago, Ill.....	4	.....	St. Louis, Mo.....	9	3
Cincinnati, Ohio.....	3	.....	San Diego, Cal.....	1	.....
Cleveland, Ohio.....	8	2	San Francisco, Cal.....	5	.....
Danville, Ill.....	.....	1	South Bethlehem, Pa.....	2	.....
Elmira, N. Y.....	1	.....	Spokane, Wash.....	.....	.....
Harrisburg, Pa.....	1	.....	Springfield, Ill.....	1	.....
Los Angeles, Cal.....	2	1	Springfield, Mass.....	.....	1
Milwaukee, Wis.....	2	1	Wilkinsburg, Pa.....	1	.....
New York, N. Y.....	.....	3	Yonkers, N. Y.....	.....	1

PELLAGRA.

During the week ended June 28, 1913, pellagra was reported by cities as follows: Knoxville, Tenn., 1 death; Montgomery, Ala., 1 death; San Diego, Cal., 1 case, with 1 death.

California—Los Angeles.

Senior Surg. Brooks, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, one case of pellagra had been notified in Los Angeles, Cal.

PLAGUE.**Rats Collected and Examined.**

Places.	Week ended—	Found dead.	Total collected.	Examined.	Found infected.
California:					
Cities—					
Oakland.....	June 28-13.....	28	630	452	.....
Berkeley.....	do.....	9	180	123	.....
San Francisco.....	do.....	25	1,842	1,158	.....
Washington:					
City—					
Seattle.....	do.....		924	876	.....

¹Twenty-five rats were taken from the steamship Harpalyce, from Manila.

California—Squirrels Collected and Examined.

During the week ended June 28, 1913, there were examined for plague infection 860 squirrels from Contra Costa County, 100 from San Joaquin County, 104 from San Benito County, and 50 from Alameda County.

Plague-infected Squirrels Found.

During the period from June 17 to 27, 1913, 56 plague-infected ground squirrels were found in Contra Costa County. On June 16 a plague-infected squirrel was found in San Benito County, 6 miles from Hollister.

PNEUMONIA.**Cases and Deaths Reported by Cities for Week Ended June 28, 1913.**

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Beaver Falls, Pa.....	1	.....	Mount Vernon, N. Y.....	3	.....
Binghamton, N. Y.....	3	1	New Castle, Pa.....	1	.....
Braddock, Pa.....	1	.....	Pittsburgh, Pa.....	29	25
Chicago, Ill.....	27	63	San Diego, Cal.....	1	1
Cleveland, Ohio.....	15	9	San Francisco, Cal.....	7	.....
Erle, Pa.....	1	.....	Schenectady, N. Y.....	1	.....
Marinette, Wis.....	1	1	York, Pa.....	1	.....

RABIES.

During the week ended June 28, 1913, rabies was reported by cities as follows: Montgomery, Ala., 1 death; Providence, R. I., 1 case with 1 death.

TETANUS.

During the week ended June 28, 1913, tetanus was reported by cities as follows: Boston, Mass., 1 case with 1 death; Cleveland, Ohio, 1 death; New Orleans, La., 4 deaths.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS.

State Reports for June, 1913.

	Scarlet fever.	Measles.	Diphtheria.
Maryland, exclusive of Baltimore City.....	30	508	32
New Jersey.....	382	.....	433

Wisconsin Report for May, 1913.

The State Board of Health of Wisconsin reported that during the month of May, 1913, 236 cases of scarlet fever, 1,036 cases of measles, and 140 cases of diphtheria had been notified in Wisconsin.

Evansville, Ind.—Scarlet Fever, Measles, and Diphtheria.

Surg. Clark of the Public Health Service reported by telegraph that during the week ended July 12, 1913, 3 cases of scarlet fever, 9 cases of measles, and 1 case of diphtheria had been notified in Evansville, Ind., making totals of 459 cases of scarlet fever reported since October 1, 1912, 139 cases of measles reported since January 1, 1913, and 334 cases of diphtheria reported since August 1, 1912.

Los Angeles, Cal.—Scarlet Fever and Measles.

Senior Surg. Brooks, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 13 cases of scarlet fever and 32 cases of measles had been notified in Los Angeles, Cal., making a total of 6,429 cases of measles reported since January 1, 1913.

Pittsburgh, Pa.—Measles.

Surg. Stoner, of the Public Health Service, reported by telegraph that during the week ended July 12, 1913, 94 cases of measles, with no deaths, had been notified in Pittsburgh, Pa., making a total of 9,616 cases, with 163 deaths, reported since November 1, 1912. During the week ended July 5, 1913, 26 cases of measles were notified instead of 25 cases as previously reported.

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

Cases and Deaths Reported by Cities for Week Ended June 28, 1913.

Cities.	Population, United States census, 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tubercu- losis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	558,485	197	18	1	33	1	23	2	17	1
Boston, Mass.	670,585	222	39	5	135	1	27	6	67	13
Chicago, Ill.	2,185,283	584	169	20	213	1	214	19	200	68
Cleveland, Ohio.	560,663	162	21	5	118	2	20	1	36	8
New York, N. Y.	4,766,883	1,182	302	40	859	16	136	5	481	162
Philadelphia, Pa.	1,549,008	457	21	2	128	1	50	3	95	50
Pittsburgh, Pa.	533,905	169	19	21	39	1	52	3	25	11
St. Louis, Mo.	687,029	213	36	2	22	.....	16	1	26	15
From 300,000 to 500,000 inhabit- ants:										
Buffalo, N. Y.	423,715	192	6	1	29	2	5	2	31	14
Cincinnati, Ohio.	364,463	134	7	.....	6	.....	8	.....	30	21
Los Angeles, Cal.	319,198	121	5	1	112	.....	2	.....	17	18
Milwaukee, Wis.	373,857	98	17	2	35	.....	18	2	33	19
New Orleans, La.	339,075	122	13	1	23	2	3	.....	43	9
San Francisco, Cal.	416,912	139	8	.....	16	.....	5	1	15	16
Washington, D. C.	331,069	108	2	.....	17	.....	1	.....	22	13
From 200,000 to 300,000 inhabit- ants:										
Providence, R. I.	224,326	71	8	1	6	1	8	1	3	11
From 100,000 to 200,000 inhabit- ants:										
Bridgeport, Conn.	102,054	35	1	1	9	.....	3	.....	5	.....
Cambridge, Mass.	104,839	19	3	.....	26	.....	1	.....	8	3
Columbus, Ohio.	181,548	68	3	.....	15	.....	3	.....	2	3
Dayton, Ohio.	116,577	28	6	.....	5	.....	.....	.....	1	1
Fall River, Mass.	119,295	29	3	.....	17	2	17	.....	3	6
Grand Rapids, Mich.	112,571	25	10	.....	16	.....	6	.....	5	2
Lowell, Mass.	106,294	29	2	2	28	.....	3	.....	.....	.....
Nashville, Tenn.	110,364	35	2	.....	.....	.....	1	.....	5	4
Oakland, Cal.	150,174	51	1	.....	.....	.....	1	.....	5	5
Richmond, Va.	127,628	77	1	.....	3	.....	1	.....	7	7
Spokane, Wash.	104,402	.....	.....	.....	7	.....	2	2	.....	.....
Toledo, Ohio.	168,497	54	.....	.....	28	.....	2	1	1	3
Worcester, Mass.	145,986	39	4	.....	7	1	3	1	7	.....
From 50,000 to 100,000 inhabit- ants:										
Altoona, Pa.	52,127	13	1	.....	.....	.....	3	.....	1	.....
Bayonne, N. J.	55,545	.....	2	.....	.....	.....	6	.....	7	.....
Brockton, Mass.	56,878	11	.....	.....	8	.....	1	.....	4	1
Camden, N. J.	94,538	.....	4	.....	4	.....	2	.....	10	.....
Duluth, Minn.	78,466	21	3	8	5	.....	1	.....	1	5
Elizabeth, N. J.	73,409	.....	4	.....	1	.....	1	.....	6	2
Erie, Pa.	66,525	18	.....	.....	6	.....	8	.....	2	.....
Fort Wayne, Ind.	63,933	22	5	.....	30	.....	.....	.....	.....	1
Harrisburg, Pa.	64,186	9	.....	.....	9	.....	.....	.....	.....	1
Hartford, Conn.	98,915	49	6	.....	5	.....	7	.....	.....	3
Hoboken, N. J.	70,324	31	10	.....	4	.....	4	.....	13	1
Johnstown, Pa.	55,482	24	4	.....	13	.....	1	.....	.....	.....
Kansas City, Kans.	82,331	.....	.....	.....	2	.....	.....	.....	2	.....
Lawrence, Mass.	85,892	.....	1	.....	2	.....	1	.....	1	3
Lynn, Mass.	89,336	18	5	1	9	.....	1	.....	1	1
Manchester, N. H.	70,063	17	.....	.....	21	.....	1	.....	2	2
New Bedford, Mass.	96,652	37	2	1	6	.....	1	.....	4	2
Oklahoma City, Okla.	64,205	8	.....	.....	12	.....	.....	.....	3	.....
Passaic, N. J.	54,773	23	1	.....	14	.....	1	.....	3	1
Pawtucket, R. I.	51,622	.....	.....	1	.....	.....	.....	.....	.....	.....
Reading, Pa.	96,071	34	5	1	5	.....	7	1	.....	3
Saginaw, Mich.	50,510	6	.....	.....	1	.....	.....	.....	.....	.....
St. Joseph, Mo.	77,403	21	1	.....	5	.....	1	.....	2	3
Schenectady, N. Y.	72,826	13	1	.....	7	.....	11	2	.....	.....
South Bend, Ind.	53,684	20	1	1	.....	.....	.....	.....	.....	2
Springfield, Ill.	51,678	13	2	.....	2	1	.....	.....	.....	.....
Springfield, Mass.	88,926	39	2	.....	17	.....	1	.....	3	3
Trenton, N. J.	96,815	46	3	.....	15	.....	18	3	5	3
Wilkes-Barre, Pa.	67,105	22	.....	.....	11	.....	6	.....	7	.....
Yonkers, N. Y.	79,803	21	4	.....	14	.....	4	.....	5	2
From 25,000 to 50,000 inhabit- ants:										
Atlantic City, N. J.	46,150	.....	2	.....	7	.....	.....	.....	.....	.....
Aurora, Ill.	29,807	6	.....	.....	.....	.....	.....	.....	.....	.....
Austin, Tex.	29,860	.....	.....	.....	2	.....	4	.....	.....	3

SCARLET FEVER, MEASLES, DIPHTHERIA, AND TUBERCULOSIS—Contd.

Cases and Deaths Reported by Cities for Week Ended June 28, 1913—Contd.

Cities.	Population, United States census, 1910.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants—Continued.										
Binghamton, N. Y.	48,443	18			82	2			3	1
Brookline, Mass.	27,792	4			3		1		1	
Chelsea, Mass.	32,452	5	1		3		1		3	1
Chicopee, Mass.	25,401	3							1	
Danville, Ill.	27,871	9			12					1
East Orange, N. J.	34,371		3		6				2	
Elmira, N. Y.	37,176	7			2				1	
Everett, Mass.	33,484	10	1		11		2			1
Fitchburg, Mass.	37,826	4			4				1	1
Haverhill, Mass.	44,115	18	1		1				1	1
Kalamazoo, Mich.	39,437	10			2				3	1
Knoxville Tenn.	36,346	13								2
Lancaster, Pa.	47,227				1		1			
Lexington, Ky.	35,099	23	1		19				4	1
Lynchburg, Va.	29,494	11					1			4
Malden, Mass.	44,404	12	1	1	4		1		1	
Montgomery, Ala.	38,136	23								2
Mount Vernon, N. Y.	30,919				4				2	
Newcastle, Pa.	36,280				1					
Newport, Ky.	30,309	12							2	2
Newton, Mass.	39,806	11			6		1			
Niagara Falls, N. Y.	30,445	10	1		9		3		6	
Norristown, Pa.	27,875	8	1							
Orange, N. J.	29,630	12			2					1
Pittsfield, Mass.	32,121	12	1		17		1		2	1
Portsmouth, Va.	33,190	9			3					1
Racine, Wis.	38,002	8	6	2	8		4			
Roanoke, Va.	34,874	20			3				2	
Sacramento, Cal.	¹ 44,696	24								4
San Diego, Cal.	39,578	8	3	1	1				5	5
South Omaha, Nebr.	26,259	6								
Springfield, Ohio.	46,921		1		8		1			
Superior, Wis.	40,384	15			4	1	2			4
Taunton, Mass.	34,259	11	1	1	3				2	1
Waltham, Mass.	27,534	7	3		1				2	
West Hoboken, N. J.	35,403		2		5		3		1	
Wheeling, W. Va.	41,641	17	2	5						2
Williamsport, Pa.	31,860	5	1		1		1			
York, Pa.	44,750		1						4	
Zanesville, Ohio.	28,026	3								
Less than 25,000 inhabitants:										
Alameda, Cal.	23,833	6			1					
Ann Arbor, Mich.	14,817	9			15				6	
Beaver Falls, Pa.	12,191				3					
Braddock, Pa.	17,759		1		1				1	
Cambridge, Ohio.	17,327	1			7					
Clinton, Mass.	13,075								2	
Coffeyville, Kans.	4,953								1	
Columbus, Ind.	6,719				6	1				
Concord, N. H.	21,477	8	1		4					
Cumberland, Md.	21,839	9			13				2	3
Dunkirk, N. Y.	11,616	4			19					
Franklin, N. H.	6,132				2					
Galesburg, Ill.	22,089	5								
Gloucester, Mass.	26,121	11								
Harrison, N. J.	14,489	3	1							
Kearney, N. J.	18,659	5	3		2					
La Fayette, Ind.	20,081	6								
Marinette, Wis.	16,195	4								1
Massillon, Ohio.	23,830	1								
Marlboro, Mass.	13,606	2			13					
Medford, Mass.	23,150	4	1		2		3			1
Melrose, Mass.	15,715	3								
Moline, Ill.	24,190	4			3					
Montclair, N. J.	21,450	8		1						1
Morristown, N. J.	12,507	4			2					
Muscatine, Iowa.	16,000	1			2					
Nanticoke, Pa.	18,857	6	1							
Newburyport, Mass.	19,240	6			3					

¹ Adjacent territory having been annexed city population is estimated at about 70,000.

IN INSULAR POSSESSIONS.

HAWAII.

Examination of Rodents.

Rats and mongoose have been examined in Hawaii as follows: Honolulu—week ended June 14, 1913, 311; week ended June 21, 398. Hilo—week ended June 7, 1,482; week ended June 14, 1,360. Honokaa—week ended June 7, 1,262; week ended June 14, 1,633. No plague-infected rodent was found.

PORTO RICO.

Rodents Collected and Examined.

Passed Asst. Surg. Creel reports that during the week ended June 28, 1913, there were examined 1,712 rodents collected from various points in Porto Rico, and that of these, 530 were collected from various parts of San Juan municipality. None was found infected with plague.

FOREIGN REPORTS.

CHINA.

Amoy—Plague.

Acting Asst. Surg. Strick reported June 9: Plague continues prevalent in Amoy and the international settlement of Kulangsu. It is estimated that from 10 to 20 deaths from plague occur daily in Amoy city. A death from pneumonic plague occurred in Kulangsu June 6. The disease is present in the bubonic and pneumonic forms.

Hongkong—Plague—Plague-Infected Rats.

During the week ended May 31, 1913, there were notified at Hongkong 17 cases of plague with 14 deaths.

During the same period there were examined for plague infection 2,467 rats, of which number 13 were found to be plague infected.

Shanghai—Plague.

Seven cases of plague with 6 deaths were notified in Shanghai June 5, 1913. The cases occurred among Chinese living near the water front. The focus is new but is in the same general locality in which the first plague-infected rats were found in Shanghai. The source of infection has not been determined.

CUBA.

Habana—Yellow Fever on Vessel.

A case of yellow fever developed July 16 at Habana on the steamship *Hydra*, from Manaos and Para, Brazil, and West Indian and Cuban ports. The case occurred in the person of the captain of the vessel. The *Hydra* gave a history of 4 deaths from yellow fever during the voyage, of which 2 deaths occurred at Manaos, 1 on leaving Guantanamo and 1 on arrival at Cienfuegos. The vessel left Manaos June 17 and Para June 21, 1913.

JAPAN.

Communicable Diseases.

The following statement of communicable diseases reported in Japan is for the Empire exclusive of the island of Taiwan (Formosa):

Month of April, 1913.

Diseases.	Cases.	Deaths.	Diseases.	Cases.	Deaths.
Diphtheria.....	1,746	461	Scarlet fever.....	137	13
Dysentery.....	115	26	Smallpox.....	17	2
Paratyphoid fever.....	93	20	Typhoid fever.....	981	198

¹ The smallpox cases were distributed as follows: Hokkaido and Kanagawa-ken, 1 case each; Nagasaki-ken, 3 cases; O-ita-ken, 2 cases. The two fatal cases occurred in Nagasaki-ken.

Jan. 1 to Apr. 30, 1913.

Cholera.....	76	22	Scarlet fever.....	516	50
Diphtheria.....	8,222	2,267	Smallpox.....	11	3
Dysentery.....	303	77	Typhoid fever.....	4,250	996
Paratyphoid fever.....	380	70			

JAVA.

Status of Plague.

Plague was reported present in east Java during the month of April, 1913, as follows:

Districts.	Cases.	Deaths.	Districts.	Cases.	Deaths.
Kediri.....	96	85	Surabaya.....	22	21
Madioen.....	45	44			
Malang.....	533	511	Total.....	696	661

PERU.

Status of Plague.

Plague has been reported in Peru as follows:

MAY 19-JUNE 8, 1913.

Places.	Cases remaining May 19.	New cases.	Deaths.	Cases remaining June 8.
Lima.....	7	6		8
Chiclayo.....	4	4		
Moñeno.....	3	1		1
Trujillo ¹				

¹ Present.

SERVIA.

Belgrade—Cholera.

July 10 cholera was reported present at Belgrade.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended July 18, 1913.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies: Java— Batavia.....	May 25-31.....	54	41	2 cases among Europeans.
Servia: Belgrade.....	July 10.....			Present.
Turkey in Europe: Saloniki, vilayet.....				June 22, abating; July 10, still present in Kavalla, Drama, Orfana, Serres, and Stroumitza.

PLAGUE.

Arabia: Aden.....	June 11-25.....	7	3	Total Apr. 9-June 25: Cases 81, deaths 59.
Chile: Iquique.....				June 8, 2 cases with 1 death.
China.....				June 14, still present along the Swatow-Chaochowfu Railway. 10 to 20 deaths daily.
Amoy.....	May 25-June 7.....			1 or 2 deaths daily.
Kulangsu.....	do.....			
Hongkong.....	do.....	39	32	
Shanghai.....	June 1-7.....	7	6	Among natives.
Dutch East Africa: ¹ Districts— Usamwo.....				Present.
Msungi.....	Mar. 15-May 10.....			Do.
Nora.....	do.....			Do.
Urima.....	do.....			
Muanza, district.....	do.....	244	223	
India: Bombay.....	June 1-7.....	61	53	
Karachi.....	do.....	25	22	
Dutch East Indies: Java— Districts— Kederi.....	Apr. 1-30.....	96	85	
Malang.....	do.....	533	511	
Mdioen.....	do.....	45	44	
Surabaya.....	do.....	22	21	
Peru: Departments— Arequipa— Mollendo.....	May 19-June 8.....	1		
Libertad— Trujillo.....	do.....			Present. Salaverry, June 4-17, 2 cases.
Lima.....	May 19-June 8.....	6		

SMALLPOX.

Australia: Sydney.....	July 7.....			Present.
Canada: Ottawa.....	June 29-July 5.....	2		
Winnipeg.....	June 22-28.....	4		
S. Johns.....	June 29-July 5.....	1		
China: Amoy.....	May 25-31.....			Do.
Kulangsu.....	do.....			Do.
Hongkong.....	do.....	3	3	
Egypt: Alexandria.....	June 11-17.....	8	3	
Cairo.....	June 1-7.....	7	1	
France: Paris.....	June 8-14.....	3		
Germany.....	June 15-28.....	2		
India: Bombay.....	June 1-7.....	12	4	
Madras.....	do.....	4	2	

¹ From the Veröffentlichungen des Kaiserlichen Gesundheitsamtes, July 2, 1913.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.**Reports Received During Week Ended July 18, 1913—Continued.****SMALLPOX—Continued.**

Places.	Date.	Cases.	Deaths.	Remarks.
Java:				
Surabaya.....	May 18-24.....	2		
Japan:				
Tokyo.....	June 18.....	1		
Hokkaido.....	Apr. 1-30.....	1		
Mexico:				
Aguascalientes.....	June 23-29.....		3	
Hermosillo.....	June 22-28.....	19	21	
Mexico.....	Apr. 20-May 10.....	42	28	
San Luis Potosi.....	Apr. 27-May 3.....	3	2	
Veracruz.....	July 22-28.....	4		
Portugal:				
Lisbon.....	June 16-21.....	7		
Russia:				
Odessa.....	June 8-21.....	30	5	
Servia:				
Belgrade.....	June 15-21.....	5	1	
Switzerland:				
Cantons—				
Basel.....	.....do. ?.....	2		
Zurich.....	May 18-24.....	1		From Paris.
Turkey in Asia:				
Beirut.....	June 8-14.....	5		
Turkey in Europe:				
Constantinople.....	June 15-21.....		4	
Saloniki.....	June 16-22.....	3	4	

Reports Received from June 28 to July 11, 1913.**CHOLERA.**

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies:				
Java—				
Batavia.....	May 18-24.....	28	21	
Beroet.....	Mar. 24-Apr. 6.....	90	81	
India:				
Bassein.....	May 4-17.....	20	14	
Calcutta.....	Apr. 27-May 24.....		214	
Bombay.....	May 25-31.....	3	2	
Moulmine.....	May 4-17.....	4	4	
Siam:				
Bangkok.....	Mar. 23-May 17.....		7	

YELLOW FEVER.

Brazil:				
Pernambuco.....	May 1-31.....		1	
Rio de Janeiro.....	May 25-31.....	1		
Do.....	June 1-7.....	1	1	
Ecuador:				
Duran.....	May 1-31.....	1		
Guayaquil.....	.....do.....	15	11	
Milagro.....	.....do.....	8	4	
Naranjito.....	.....do.....	1	1	
Mexico:				
Campeche.....	May 25-31.....	1	1	One fatal case to June 7 reported on p. 1373, Part I.
Venezuela:				
Caracas.....	Feb. 1-28.....	1		
Do.....	June 18.....	1		From Valencia.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28, 1912, to July 11, 1913—Continued.

PLAGUE.

Places.	Date.	Cases.	Deaths.	Remarks.
Arabia:				
Aden.....	June 3-10.....	1	1	
Chile:				
Iquique.....	May 11-17.....	2	1	
China.....				May 18-24, still present in Ampo, Chaoyang, Fungshun, Kit-yang, Puning, Ta-pu, and other points along the railway.
Kulangsu.....	Jan. 1-May 24.....		29	
Canton.....				May 1-15, 60 to 70 fatal cases in the eastern part. Apr. 10-May 22, 300 fatal cases in the Sun-niger district.
Hongkong.....	May 18-24.....	24	21	July 8: Cases, 17.
Kaochow.....	Apr. 10-May 22.....			10 deaths daily.
Ecuador:				
Guayaquil.....	May 1-31.....	9	2	
Milagro.....	do.....	1	1	
Egypt.....				Jan. 1-June 12: Cases, 463; deaths, 222. May 30-June 12: Cases, 64; deaths, 12.
Alexandria.....	May 28-June 7.....	6	1	
Port Said.....	June 2.....	2	1	
Provinces—				
Fayoum.....	May 30-June 12.....	26	7	
Galioubeh.....	May 21-June 10.....	4	1	
Garbieh.....	May 27-June 12.....	5		Jan. 1-May 26: Cases, 12; deaths, 5.
Gizeh.....	May 29-30.....	4	1	
Menouf.....	May 28-June 12.....	1	1	Jan. 1-May 26: Cases, 51; deaths, 24.
Mnieh.....	May 30-June 11.....	6	2	
India:				
Bombay.....	May 18-31.....	311	271	
Calcutta.....	Apr. 27-May 24.....		120	
Karachi.....	May 18-31.....	70	64	
Peru:				
Departments—				
Arequipa—				
Mollendo.....	Apr. 28-May 18.....	4	2	
Libertad—				
Chiclayo.....	do.....	1	1	
San Pedro.....	do.....	1	1	
Trujillo.....	do.....			1 case from Salaverry.
Philippine Islands:				
Manila.....	May 11-24.....	3		
Siam:				
Bangkok.....	Mar. 23-Apr. 19.....		4	

SMALLPOX.

Algeria:				
Department—				
Oran.....	Apr. 1-30.....	5	1	
Arabia:				
Aden.....	June 3-9.....	1		
Austria-Hungary:				
Fiume.....	May 27-June 9.....	12		
Trieste.....	June 1-7.....	1		
Brazil:				
Pars.....	June 15-21.....	12	1	
Pernambuco.....	May 1-31.....		33	
Rio de Janeiro.....	May 4-June 7.....	22	5	
Canada:				
Provinces—				
British Columbia—				
Vancouver.....	June 8-14.....	1	1	
Manitoba—				
Winnipeg.....	June 15-21.....	4		
Ontario—				
Fort William.....	June 10-30.....	4		
Ottawa.....	June 8-14.....	1		
Toronto.....	June 16-28.....	5		
Quebec—				
Grosse Isle Quarantine.....	June 20.....	1	1	In steerage.
Quebec.....	June 8-14.....	2		
St. Johns.....	May 25-June 7.....	3		

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from June 28 to July 11, 1913—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China:				
Hongkong.....	May 18-24.....	2	1	
Nanking.....	May 11-17.....			Present.
Shanghai.....	May 19-June 8.....	3	23	Deaths among natives.
Dutch East Indies:				
Surabaya.....	May 11-17.....	1		
Egypt:				
Alexandria.....	May 28-June 10.....	8	4	
Cairo.....	May 14-27.....	7		
France:				
Marseille.....	May 1-31.....		5	
Paris.....	May 25-June 14.....	6		
Germany.....				
Great Britain:				
Liverpool.....	June 8-14.....	1		
Greece:				
Patras.....	June 9-15.....		2	
India:				
Bombay.....	May 26-31.....	14	9	
Karachi.....	May 25-31.....	9		
Madras.....	May 24-31.....		2	
Italy:				
Rome.....	Jan. 5-11.....	1	1	
Luxemburg:				
Esch.....	May 17-31.....	2		
Mexico:				
Acapulco.....	May 25-31.....		1	
Aguascalientes.....	June 9-22.....		10	
Hermosillo.....	June 7-21.....	21	30	Among troops.
Mexico.....	Apr. 20-May 10.....	42	23	
Monterey.....	June 9-15.....		1	
Veracruz.....	June 16-22.....	2	1	
Newfoundland:				
St. Johns.....	June 15-28.....	6		
Portugal:				
Lisbon.....	May 25-June 14.....	21		
Russia:				
Libau.....	June 2-8.....	1		
Moscow.....	May 18-June 7.....	26	7	
St. Petersburg.....	May 18-31.....	5		
Siberia—				
Vladivostok.....	May 7-13.....	2		
Samoa:				
Apia.....				May 18, 1 death on transport Michael Jepson from Hongkong, and to June 4, 4 cases transferred from this vessel to a lighter 3 miles east.
Servia:				
Belgrade.....	June 1-7.....	3		
Siam:				
Bangkok.....	Mar. 23-May 17.....		5	
Spain:				
Barcelona.....	June 8-14.....		11	
Valencia.....	June 1-14.....	6		
Straits Settlements:-				
Singapore.....	May 4-10.....	1	1	
Switzerland:				
Basel.....	June 1-14.....	10		
Turkey in Asia:				
Beirut.....	May 25-June 7.....	7		
Damascus.....	June 1-7.....			Present.
Mersina.....	May 25-31.....		2	
Smyrna.....	Apr. 26-May 31.....		27	
Turkey in Europe:				
Constantinople.....	June 1-14.....		14	
Saloniki.....	June 2-15.....	6	5	

SANITARY LEGISLATION.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

MANCHESTER, N. H.

Milk—Production, Care, and Sale. (Reg. Bd. of H., July 2, 1912.)

RULE 1. No milk shall be sold, offered for sale, or distributed in the city of Manchester which was drawn from cows within 15 days before or 5 days after parturition.

RULE 2. No milk for sale or distribution shall be stored, cooled, strained, or mixed in any barn or room which is occupied by horses, cows, or other animals, unless the dairy room or storage room is separated from other parts of the building, and provision made for the exclusion of dust and flies, to the satisfaction of the board of health.

RULE 3. No person, firm, or corporation shall sell or offer, expose or keep for sale, in any vehicle, shop, store, or other place where goods and merchandise are sold, milk or cream, unless the same is sold or offered, exposed or kept for sale, in tightly closed or capped bottles or receptacles which have been approved by the board of health.

Milk, cream, or skim milk kept for sale in any shop, store, bakery, restaurant, market, or establishment shall be stored and kept in a covered box, cooler, or refrigerator, and the temperature shall be at all times not more than 55 degrees Fahrenheit.

Nothing contained herein shall prevent the sale of milk or cream from cans, crocks, coolers, or other receptacles in restaurants or hotels when the milk or cream is to be consumed in the restaurant or hotel by guests or patrons ordering the same.

RULE 4. All wagons, sleighs, or other vehicles used in conveying milk, cream, or skim milk for distribution or sale or collecting from raisers, shall be covered and kept in a cleanly condition, free from odors, and swill or any other refuse or decaying vegetable or animal matter shall not be carried on said wagon, sleigh, or other vehicle.

RULE 5. All bottles, cans, or vessels of any sort used in the distribution or sale or collection or preparation of skim milk or cream shall be cleansed and scalded or sterilized before they are used again for the same purpose.

No bottles shall be filled except at the dairy or creamery.

RULE 6. Immediately on the occurrence of any case of scarlet fever, diphtheria, typhoid fever, or any other infectious disease, either in himself, his family, or among his employees or their immediate associates, every person engaged in the production, distribution, or sale of milk, skim milk, or cream shall notify the Board of Health of Manchester, and at the same time shall suspend the sale of milk, skim milk, or cream until authorized to resume the same by the said Manchester Board of Health.

No bottles, cans, or vessels used shall be removed from a private house, tenement, or apartment, or place wherein a person has infectious disease, except with the consent of said Board of Health.

RULE 7.—No person by himself, or by his servant or agent, or as the servant or agent of any other person, firm, or corporation, shall in the city of Manchester sell, exchange,

or deliver any milk, skim milk, or cream which contains more than 500,000 bacteria per cubic centimeter or which has a temperature higher than 55 degrees Fahrenheit.

The latter part of this rule in regard to temperature does not apply to raisers who deliver milk which is distributed warm within one hour from the time it is drawn from the cow.

RULE 8.—Any person, firm, or corporation who shall violate any of the provisions of the above rules shall be fined \$10 for each offense.

MANKATO, MINN.

Department of Health—Organization, Powers, and Duties. (Ord. Dec. 23, 1912.)

SECTION 1. The department of public health shall consist of the mayor, who shall be ex officio superintendent, the health commissioner, who shall be a physician duly admitted to practice in the State of Minnesota, and city clerk of said city of Mankato.

SEC. 2. The council shall, when necessary, appoint one or more health inspectors and such other persons as are necessary to carry out the proper and efficient working of the department. The health inspectors shall be commissioned and qualified as special policemen, and shall have the power to arrest, when necessary, any person violating any of the sanitary laws and regulations of said city. Said health inspectors shall be under the supervision of the health commissioner and shall obey all orders from him or from the department of public health through him.

SEC. 3. The department of health shall meet at such times as it may deem necessary. A majority of the members of the department shall constitute a quorum to do business.

SEC. 4. Special meetings may be called by the president of the department of public health at any time, and special meetings shall be called by him upon written notice being filed with the secretary of the board, signed by two members thereof.

SEC. 5. The city clerk shall be secretary of the department of public health.

SEC. 6. The department of public health shall exercise general supervision over the health of the city. It shall make such investigations and reports, and obey such directions concerning communicable diseases, as the State board of health of the State of Minnesota may require or give, and under the general supervision of the State board of health it shall cause all laws and regulations relating to the public health to be obeyed and enforced.

SEC. 7. The department of public health shall provide the books and files necessary for keeping a record of all the transactions of said department.

SEC. 8. Every person in the city of Mankato shall observe and obey each and every special regulation and every order of the department of public health that is or may be made for carrying into effect any of the provisions of this or any other ordinance of said city relative to the health thereof, or any law of this State or otherwise, whether issued directly by such board or promulgated by the health commissioner.

SEC. 9. Said department of public health shall audit and allow all bills of the department of public health or health commissioner before the same are presented to the council for allowance, and shall, subject to the provisions of the city charter, make such rules and regulations for the conduct of the business of the department of public health as to it may seem fit.

SEC. 10. The health commissioner shall be president of the department and shall have and exercise a general supervision over the sanitary condition of the city. He shall give the council and the department of public health all such professional advice and information as they may require for the purpose of preserving the public health. He shall investigate the existence of any communicable or pestiferous disease and adopt all measures necessary to arrest the progress thereof.

He shall enforce all laws of the State, and ordinances of the city, in relation to health and sanitary conditions, and shall cause all nuisances as hereinafter defined to be abated or removed. He is hereby empowered and it is hereby made his duty

and the duty of the health inspectors to enter any building in said city between sunrise and sunset for the purpose of enforcing the provisions of this ordinance, and for the purpose of ascertaining if such building is in good sanitary condition.

SEC. 11. The health commissioner shall make a thorough sanitary inspection of the city in the month of May, and present written report of such inspection, together with his recommendations, to the council on or before the 1st day of June of the year in which the inspection is made. The health commissioner shall send a copy of this report to the Minnesota State Board of Health before July 1 of the same year.

Privy Vaults and Cesspools—Removal of Contents, and Connection with Sewers.
(Ord. Dec. 23, 1912.)

SEC. 12. No person, company, or corporation shall, within the city of Mankota, empty, clean, or remove the contents of any privy, vault, sink, or private drain, without first having obtained a permit from the health commissioner.

SEC. 13. Every dwelling house now erected or hereafter to be erected fronting on the streets, avenues, or alleys where sewers and water mains have been constructed and laid or adjacent to said streets, avenues, or alleys, and every water-closet, privy vault, and cesspool along the line of such sewers and water mains, shall be properly connected with the sewer and with the water main whenever in the opinion of the department of public health it shall be deemed to be in the interest of public health that such sewer and water connections should be made, which connection shall be in all parts adequate for the purpose so as to permit entirely and freely to pass whatever enters the same, and all such dwelling houses, water-closets, privy vaults, or cesspools shall be provided with proper traps, ventilating pipes, and tight pipes for connecting with house sewers, and such connection with said water mains shall be so as to provide sufficient water for flushing the same, and every owner, agent, lessee, and occupant shall take adequate measures to prevent improper substances from entering such water-closets, privy vaults, and cesspools or their connections, and to secure the prompt removal of any improper substance that may enter therein, so that no accumulation shall take place; and so as to prevent any exhalation therefrom, offensive, dangerous, or prejudicial to health, and so as to prevent the same from being or becoming obstructed.

SEC. 14. Any privy that is foul or improperly constructed or kept so as to be accessible to flies, or any privy erected or maintained nearer than 20 feet to any street, avenue, public park, dwelling, shop, or well, or any privy erected or maintained within the limits of the city of Mankato, unless the same is furnished with a vault approved by the health commissioner, is hereby declared a nuisance.

Nuisances—Abatement of. (Ord. Dec. 23, 1912.)

SEC. 15. If any person within the limits of the city of Mankato shall permit or suffer on his premises or on premises of which he may be the agent or occupant, any nuisance, source of filth, or cause of sickness, the health commissioner shall order the owner or occupant thereof to remove the same at his expense within a time not to exceed 10 days, the exact time to be specified in the notice. Said notice shall be served by the chief of police or any police officer or health inspector of said city by delivering a copy thereof to the owner, occupant, or agent of such property. If the owner of the property is unknown or absent with no known representative or agent upon whom notice can be served, then the chief of police, police officer, or health inspector shall post a written or printed notice upon the property or premises setting forth that unless the nuisance, source of filth, or cause of sickness is abated or removed within 10 days, the chief of police, police officer, or inspector will abate or remove, or cause to be abated or removed, at the expense of the owner, the nuisance, source of filth or cause of sickness complained of and found to exist; provided that in carrying

out the provisions of this act no debt or claim against any individual owner or any one lot or parcel of real property shall exceed the sum of \$25.

If the owner, occupant, or agent shall fail or neglect to comply with the requirement of said notice, then the health commissioner shall proceed to have the nuisance, source of filth, or cause of sickness, described in the notice, removed or abated from said lot or parcel of ground and report the cost thereof to the city clerk, and the cost of such removal or abatement shall be assessed and charged against the lot or parcel of ground on which the nuisance, source of filth, or cause of sickness was located, and the city clerk shall on or before the 10th day of October of each year certify the aforesaid costs to the county auditor of Blue Earth County. It shall be the duty of the said auditor to enter the amount of said assessment upon the tax duplicate of the county at the time said duplicates are made up and the same for each year ending November 1 shall be carried to the tax becoming due or payable in January of the following year and enforced and collected in the manner provided for the enforcement and collection of State and county taxes under and in accordance with the provisions of the general laws of the State. Such assessment when collected shall be paid over by the county treasurer to the city treasurer.

Foodstuffs—Protection of. (Ord. Dec. 23, 1912).

SEC. 16. Every butcher, grocer, baker, restaurant keeper, manufacturer, and milk dealer and their agents shall allow the parties authorized by the health commissioner to freely and fully inspect their cattle and milk, meats, fish, and vegetables or other food held, offered, and intended for sale, and are hereby required to answer all reasonable and proper questions asked by such persons relative to the condition thereof, and of the places where such articles may be.

SEC. 17. No food, meat, fish, birds or fowl, or vegetables, nor any milk, not being then healthy, fresh, sound, wholesome, and safe for human food, nor any meat or fish that died by disease or accident, shall be brought within the city of Mankato, or held for sale at any public or private markets as such food, anywhere in said city.

SEC. 18. No meat of any calf, pig, or lamb shall be brought into the city of Mankato for the purpose of being used as food or be held or offered for sale as food therein unless in the case of a calf or pig at the time it was slaughtered it was more than five weeks old, or in the case of a lamb it was at the time it was slaughtered more than eight weeks old nor shall any meager, sickly, or unwholesome fish, birds, or fowls be brought held, sold, or offered for sale as such food in said city.

SEC. 19. It shall be the duty of the health inspector upon discovering any food, meat, fish, birds or fowls, vegetables, or milk offered for sale as food within the city of Mankato that is decayed, diseased, unwholesome, or from any cause unfit for food, to at once seize and confiscate such food, meat, fish, birds or fowls, vegetables, or milk, and report the same to the health commissioner, who shall at once enter complaint against the owner or person offering such food, meat, fish, birds or fowls, vegetables, or milk for sale.

SEC. 20. Every person being the owner, agent, lessee, or occupant of any room, stall, or place where any food, meat, fish, or vegetables designated or held for human food, shall be stored or kept or shall be held or offered for sale, shall put and keep such room, stall, and place, and its appurtenances, in a cleanly and wholesome condition, and every person having charge (or interested or engaged, whether as principal or agent) in the care, or in respect to the custody or sale of any food, meat, fish, birds, fowls, or vegetables (designated for human food) shall put and preserve the same in a cleanly and wholesome condition, and shall not allow the same or any part thereof to be poisoned, infected, accessible to flies, or rendered unsafe or unwholesome for human food.

SEC. 21. It shall be the duty of every person knowing of any food, fish, meat or fowl, bird, or vegetable being brought, sold, or offered for sale (as food for human beings), or being in any market, public or private, in said city, and not being sound, healthy, or wholesome, for such food, to forthwith report such facts and the particulars relating thereto, to this department or to one of its officers.

Green Hides—Permits to Handle. (Ord. Dec. 23, 1912.)

SEC. 22. No person shall receive or store or dress or pack any green hides within the city of Mankato without first obtaining a permit from the department of public health.

Garbage—Disposal of. (Ord. Dec. 23, 1912.)

SEC. 23. Every owner or occupant of any house or place in the city of Mankato, having garbage to be taken up by the garbage collector of said city, shall provide for each house and place a sufficient number of garbage cans, each of said cans to be of ten (10) gallons capacity, with a tight fitting cover and with handles upon the sides or such other receptacle as may be approved by the department of public health. Cans must be placed at points directed by the health commissioner on premises near alleys or streets easily accessible to the collector, and when filthy, leaking, or in any way defective, be renewed.

SEC. 24. No tenement or lodging house nor any portion thereof shall be used as a place of storage for any combustible articles or any article dangerous or detrimental to health, nor shall any horse, cow, calf, swine, pig, sheep, or goat be kept in said house.

SEC. 25. Every agent or other person having the charge, control, or management, or who collects or receives the rents of any lands, premises, or other property in the city, shall disclose the name or names of the person or persons for whom such agent or other person is acting, application being made therefor by an inspector, agent, or officer of the department of public health.

SEC. 26. It shall be the duty of every contractor, scavenger, or person, his agent or employee, who have contracted or undertaken to remove any offal, rubbish, garbage, contents of manure boxes, dirt, street sweepings, nightsoil, or any filthy, offensive, or noxious substance, to remove the same with dispatch in tight fitting boxes or receptacles so as to allow no droppings or spilling of the same on the streets, walks, or premises of said city, and if any of the contents thereof shall be spilled or fall upon any street, walk, or premises, such contractor, scavenger, or person, his agent or employee, shall replace the same immediately and remove all traces thereof.

Manure and Stable Refuse—Disposal of. (Ord. Dec. 23, 1912.)

SEC. 27. Hereafter no manure shall be thrown, left, or deposited upon any street, alley, lot, or tract of land except for fertilizing purposes or the protection of plants and shrubs, houses, or buildings in winter months, and no person shall use manure of any kind either with or without a covering of dirt to fill any excavation up or to raise any street, alley, lot, or tract of land within the city of Mankato without first having obtained a permit from the health commissioner so to do.

SEC. 28. Between the 15th day of April and the 15th day of October of each year the owner, proprietor, agent, or occupant of any stable or barn where horses, cows, or other domestic animals are kept within said city, shall not deposit, cause to be deposited, or allow to accumulate within or about such premises for a longer time than twenty-four (24) hours, any manure, animal bedding, or barn refuse, but shall provide a box of sufficient size for the reception of such manure, animal bedding, or barn refuse, into which box shall be deposited or cause to be deposited all such manure, animal bedding, or barn refuse, and said box shall be so constructed so that the contents thereof is not accessible to flies, and shall be placed upon the premises owned, occupied,

or controlled by such person in a situation as remote as possible from any surrounding dwelling or street, and shall empty and cleanse the same as often as necessary and whenever directed so to do by the department of public health.

SEC. 29. No person shall throw into any manure box within said city any dead animals, garbage, offal, swill, ashes, rubbish, or house refuse, and nothing shall be thrown into said manure box but manure, straw, hay, grass, leaves, animal bedding, and barn refuse.

Tuberculosis—Cleansing of Dwellings After Death or Removal of Patients. (Ord. Dec. 23, 1912.)

SEC. 30. Every owner or agent of any dwelling or apartment in the city of Mankato occupied by a person having tuberculosis, shall, after such patient shall have died or removed from said dwelling or apartment, immediately and before the same is reoccupied, thoroughly cleanse the same under the supervision of the health commissioner of said city.

Spitting—Prohibited in Public Places. (Ord. Dec. 23, 1912.)

SEC. 31. No person shall spit, or expectorate or deposit or place any sputum, spittle, saliva, phlegm, mucus, tobacco juice, cigarette stumps, or quids of tobacco upon the floor or stairway of any part of any public hall or building in the city of Mankato, or upon the sidewalk of any public street, avenue, or highway in the city of Mankato, or upon the floors or inside furnishings of equipments, or in any place upon the outside or upon any platform of any street car while the same is in use upon any of the streets or highways in the city of Mankato, or in any manner defile or pollute the floor, furnishings, equipments, or platform of any street car while in use upon any of the streets or highways of said city.

SEC. 32. The owner, owners, agent, or manager of any street car while in use upon any streets or highways in the city of Mankato shall cause a sign to be placed in such car in a conspicuous place, calling attention to the provisions of this ordinance, and the owner, owners, or agent of any public building in the city of Mankato shall provide and maintain a sufficient number of spittoons in the halls and corridors of such buildings.

Death Certificates and Burial and Transportation Permits. (Ord. Dec. 23, 1912.)

SEC. 33. Whenever any person shall die within the city of Mankato, it shall be the duty of the physician attending such person during his or her last sickness, or of the coroner of the county of Blue Earth, when the case comes under his official notice, to furnish and deliver to the undertaker, or other person superintending the burial of said deceased person, a certificate, duly signed, setting forth as far as the same may be ascertained, the name, age, color, sex, nativity (giving state and county), occupation, whether married or single, duration of residence in the city of Mankato, cause, date, and place of death (giving street and number), and duration of last sickness of said deceased person. And it shall be the duty of the undertaker or other person in charge of the burial of said deceased person to forward it to the health commissioner within 24 hours after such death: *Provided*, That in case of death from any infectious or contagious disease, said certificate shall be so made and forwarded within 6 hours thereafter.

SEC. 34. No interment or disinterment of the dead body of any human being or disposition thereof in any tomb, vault, or cemetery shall be made within the city of Mankato without a permit therefor, granted by the health commissioner or his deputy, nor otherwise than in accordance therewith. And no sexton or other person shall assist in or assent to or allow any such interment or disinterment to be made until

such permit shall be given as aforesaid; and it shall be the duty of every sexton or other person having charge of any burying ground, cemetery, tomb, or vault, as aforesaid, who shall receive any such permit to preserve and return the same to the health commissioner at the end of every month, together with a full report on blanks which will be furnished him for that purpose, and no sexton, undertaker, or other person shall bury or cause to be buried the body of any deceased person within the city of Mankato, except in such grounds as are now known and used as burial grounds, or such as shall hereafter be by law designated and authorized to be used as such.

SEC. 35. No dead body or part of the dead body of any human being shall be in any manner carried or conveyed from, in, to, or through the city of Mankato by any person or by means of any boat, vessel, car, automobile, stage, or other vehicle, or by any public or private conveyance without a permit therefor first granted by the health commissioner or his deputy: *Provided*, That the same effect may be given by said health commissioner or deputy to a burial or transit permit issued by the proper authority of any other place or jurisdiction when the death of the person named in the permit shall have occurred within such place or jurisdiction.

SEC. 36. Whenever a permit for burial is applied for in case of death without the attendance of a physician, or if it be impossible to obtain a physician's certificate, it shall be the duty of the health commissioner or his deputy to investigate the cause and circumstances of such death, to make and sign the certificate required by section 33 of this ordinance, and if not satisfied as to the cause and circumstances of such death, he shall refer the case to the coroner of the county of Blue Earth for investigation and report, and said coroner is hereby required to make such investigation and report.

SEC. 37. It shall be unlawful for any person to carry or allow to be carried in any vehicle owned or operated by him for the conveyance of persons the body of any person who may have died of a contagious or infectious disease, but all such bodies shall be carried in a hearse or ordinary dead wagon. And all undertakers or livery keepers or other persons renting carriages must ascertain before furnishing carriages for a funeral whether or not the deceased person died of any contagious or infectious disease. It shall be the duty of all liverymen and others furnishing carriages for any funeral to cause such carriages as may have carried any of the immediate family of the deceased or any person exposed to the disease of said deceased person, to be thoroughly cleansed and disinfected at the owner's expense after having carried such persons before the same shall be let out for hire or used for the conveyance of persons.

PENALTY.

SEC. 38. Any person who violates, disobeys, omits, neglects, or refuses to comply with, or who resists, any of the provisions of this ordinance, or who refuses or neglects to obey any of the rules, orders, or sanitary regulations of the department of public health, or who omits, neglects, or refuses to comply with, or who resists any officer of the department of public health, or order or special regulation of the health commissioner, or of said department of public health, shall upon conviction thereof, before any court having competent jurisdiction, be subject to a fine not exceeding \$100 and costs of prosecution or imprisonment in the city prison or county jail of Blue Earth County for a term not exceeding 90 days.

SEC. 39. All ordinances and parts of ordinances inconsistent with this ordinance are hereby repealed.

SEC. 40. This ordinance shall take effect and be in force after 10 days from its passage and publication.

MANSFIELD, OHIO.**Common Drinking Cups—Use of in Public Places Prohibited. (Reg. Bd. of H., May 3, 1912.)**

SECTION 1. The use of public and common drinking cups, glasses, or vessels of any kind to be used in common for the purpose of drinking therefrom on railroad trains or in stations, in public or private schools, public buildings, halls, churches, theaters, markets, playgrounds, parks, stores, hotels, offices and office buildings, factories or manufacturing establishments, or in any other public place, is hereby prohibited.

SEC. 2. No person, partnership, or corporation in charge of or in control of any railroad train or station, or public or private school, public building, hall, church, theater, factory or manufacturing establishment, or in any other public place whatsoever, shall furnish, provide, place or expose, or allow to be furnished, provided, placed or exposed any cup, glass, or any other drinking vessel at any place where the public, or more than one particular individual, may or can have access to or the use of such vessel, or where such vessels may or can be used in common by the public or by more than one particular individual, or any railroad train or in any station or public or private school, public building, hall, church, theater, market, playground, park, store, hotel, office and office building, factory or manufacturing establishment, or at any other place whatever under his or its control in the city of Mansfield.

SEC. 3. The owner, lessee, or person in charge of any hotel, saloon, restaurant, drug store, soda fountain, or any place of public refreshment, shall furnish glasses, cups, dishes and other eating and drinking vessels and utensils used in the said hotel, saloon, restaurant, drug store, soda fountain, or other place of refreshment, which have been thoroughly cleansed after use by each and every customer.

SEC. 4. The foregoing are all declared to be orders and regulations of the board of health made pursuant to the provisions of the laws of the State of Ohio, and whoever violates, or obstructs, or interferes with the execution of any of the foregoing regulations and orders, or willfully, or illegally omits to obey such orders, shall be fined any sum not exceeding one hundred (\$100) dollars, or imprisoned for any time not exceeding ninety (90) days or both, but no person shall be imprisoned for any such violation or failure to obey any of the foregoing orders and regulations for the first offense, and the prosecution shall always be as and for a first offense, unless the affidavit upon which the prosecution is instituted contains the allegation that the offense is a second or repeated offense.

Each day's failure to comply with any provision of the above sections shall constitute an additional and separate offense.

SEC. 5. These regulations shall be in full force and effect from and after the first day of July, 1912.

McALESTER, OKLA.**Nuisances—Prevention and Abatement of. (Ord. No. 489, Mar. 8, 1912).**

SECTION 1. That it shall be unlawful for any occupant of any premises or the owner thereof, or the agent of any such owner, situated within the city limits of the city of McAlester, to allow to accumulate thereon any rubbish; tin cans; manure; organic waste of any kind; liquid household waste; stagnant or standing pools of water; growing weeds; bones; rags; straw; banana peels; rinds or fragments of any kind of fruit or vegetable; discarded household furniture, carpets, rugs, mattings, clothing, or shoes; and any such accumulation is hereby declared to be a nuisance and a menace to public health.

SEC. 2. That it shall be unlawful for any person within the city of McAlester to dump or throw into any street, alley or avenue, or upon any sidewalk or upon any park-

ings or public grounds or parks of the city, any article or articles or thing the accumulation of which is by section 1 of this ordinance declared to be a nuisance; or to dump or to throw any such article or thing upon private ground belonging to another, with or without the permission of any such owner of such property; or to permit any sour, unclean, or continuous stream of water to escape from premises occupied or controlled by such person into or upon private or public property not owned by such person, or into any street, alley, or avenue or thoroughfare of the city of McAlester; or to throw water or other matter from any window abutting upon any street, alley, avenue, sidewalk, or other public place or thoroughfare; or for any person to use, or permit the use of any water-closet on his premises or those occupied or controlled by him, whenever the same is not in good working condition or when water is shut off.

All pens, coops, yards, or inclosures where domestic animals, fowls, or stock, or poultry of any kind are kept shall be thoroughly cleaned whenever required by the policemen in charge of the enforcement of the sanitary ordinances of the city and shall at all times be kept free from odor and in good sanitary condition. All hen or poultry houses shall be cleaned at least once every two weeks and the floors thereof thoroughly sprinkled with lime. All surface or other closets not connected with sewers shall have a suitable box, sufficiently large and tight to prevent spilling, and shall be cleaned by the scavenger as often as necessary, for which service the occupant of the premises shall pay as required by ordinance. All water-closets shall have at all times sufficient toilet paper for use convenient to hand, and the failure or refusal of any occupant of any premises to provide such supply of toilet paper shall be prima facie evidence of the violation of the ordinances of the city prohibiting the use in such closets of other than toilet paper. The occupant of any premises, immediately upon the discovery that any closet thereon is not flushing out clean, or that in any other manner it is working imperfectly, shall immediately close and securely lock such closet and not use the same or permit it to be used until the same is placed in good working condition; but before closing such closet he shall cause the same to be thoroughly cleaned. All cisterns, water tanks, and water barrels, or other receptacles for holding water shall be inclosed and screened so as to prevent the passage of mosquitoes to or from the same. All basements and cellars shall be thoroughly drained and at all times kept free from standing water. All hotel and restaurant kitchens shall be closely screened, and no kitchen waste shall be allowed to stand exposed to flies, but shall be kept securely inclosed by screen covers or other devices until removed, and no receptacle containing kitchen slops or waste shall be allowed to run over or to be handled or managed in such way that the slops will be thrown out of such receptacle either while at any stationary place within the city or while being removed. No ashes, paper, cinders, or other like waste shall be thrown or placed in any street, alley, or public thoroughfare or grounds of the city.

SEC. 3. It shall be the duty of the sanitary policeman to inspect all premises within the city of McAlester and to thoroughly and rigidly enforce all the provisions of this ordinance, and to prosecute violations of the same; and he is hereby given authority as such officer to go upon and inspect all premises within the city, and he shall notify persons of the violation of this ordinance upon their premises and shall, within five days after such notice, if such nuisance is not abated, or abatement thereof begun in good faith, file a complaint in the municipal court against such person: *Provided*, That a failure to give any such notice shall not be a defense to any prosecution under this ordinance.

SEC. 4. Any person, or persons, who shall do or perform, or cause to be done, any act prohibited by this ordinance, or who shall neglect, refuse, or fail to perform any duty imposed by this ordinance, or who shall allow upon his premises, or those under his control, the existence of any condition prohibited by this ordinance, shall be

guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not more than one hundred dollars.

SEC. 5. On account of the unsanitary condition of the city of McAlester, and the accumulations of filth in various parts of the city, an emergency exists by reason of which it is necessary for the immediate preservation of the public health that this ordinance take effect and be in force from and after its passage, approval, and publication, and it is hereby ordained that it be in force and take effect from and after its passage, approval, and publication.

MEADVILLE, PA.

Garbage and Refuse—Disposal of. (Reg. Bd. of H., May 7, 1912.)

Rule 49. Garbage, as herein used, is intended to include all kinds of organic kitchen refuse. All garbage must be kept in tightly covered metallic cans not too large for convenient handling, which cans must be emptied and their contents removed to the city crematory at least twice a week during the months of May, June, July, August, September, and October, and at least once a week during the remaining months of the year. All rubbish and the like must be delivered at the city dump grounds, and no part thereof be deposited, burned, or buried anywhere in the city limits.

Foodstuffs—Protection of. (Reg. Bd. of H., May 8, 1912.)

RULE 1. Food products that do not have to be peeled, pared, or cooked before they are fit for consumption, when inside or outside must be tightly covered with a wood or glass cover or exposed in special cases for this purpose. Inside they must be elevated from the floor 20 inches, and when outside they must be elevated 30 inches from the floor or sidewalk. All other food products that have to be peeled, pared, or cooked before they are fit for consumption may be exposed, but must be elevated above the floor or sidewalk 20 inches.

RULE 2. All crackers, cakes, candies, or breadstuffs in barrels, boxes, buckets, baskets, and cans must be covered with tight-fitting covers which may be either wood or glass, or exposed in glass show cases.

RULE 3. All containers of various kinds holding pickles, fish, and fruit butters must be covered with tight-fitting wood or glass covers.

RULE 4. All cases or boxes used to contain breadstuff, cakes, pies, or other like products must be cleaned once every week thoroughly by washing with soap and water both inside and outside, then thoroughly rinsed and aired. All stands and wagons from which food products are vended or sold must be at all times kept clean and in a sanitary condition, free from offensive odors or any accumulation of decomposed animal or vegetable matter.

RULE 5. Handling, smelling, or tasting of food products, such as butter, fruit butters, all dairy products, meats, or allied products will not be allowed at any grocery store, bakeshop, meat shop, and market.

RULE 6. The wrapping of food products in newspapers, old sacks, or any paper that has been formerly used is strictly forbidden.

Penalty.—That any person or persons violating any of the above rules, whether vendor or vendee, shall be liable to a fine of not less than \$1 or more than \$10 for the first offense, nor less than \$10 or more than \$100 for each subsequent offense, together with costs of prosecution, which fines and penalties shall be collected in the manner provided by law for the recovery of like fines and penalties. Provided, that in default of payment the defendant shall be committed to the county jail for not less than 1 day or more than 30 days for each offense.

That any and all rules or parts of rules inconsistent with the foregoing rules are hereby repealed.

MELROSE, MASS.**Poultry—Keeping of. (Ord. July 9, 1912.)**

SECTION 1. No person shall keep any poultry, including hens, geese, or ducks, in the city of Melrose without a permit from the board of health.

SEC. 2. The board of health may make all reasonable and necessary regulations respecting the sanitary condition of any building, yard, or inclosure used for keeping poultry, and no poultry shall be allowed to run at large outside of such building, yard, or inclosure.

SEC. 3. All permits issued by the board of health for the keeping of poultry shall terminate on the 31st day of December of each year, and may be canceled by the board of health at any time for violation of the conditions of the permit.

SEC. 4. The fee for every such permit to keep poultry shall be 25 cents.

SEC. 5. Whoever, after due notice from the board of health, violates any of the provisions of this ordinance shall be liable to a penalty of not more than \$20.

MEMPHIS, TENN.**Foodstuffs—Protection of Milk and Bread. (Ord. January, 1912.)**

SECTION 1. Be it ordained by the board of commissioners of the city of Memphis, that it shall be unlawful for any person, persons, firm, or corporation to sell, offer for sale, or have in his, her, or their possession, charge, or control, for sale or distribution any milk or bread within the corporate limits of the city of Memphis unless protected from contamination as provided herein.

SEC. 2. All milk sold in less than 1-gallon lots shall be put in sterile individual containers properly sealed, in which condition it shall be delivered to the consumer, and all loose or dipped milk, whether sold from dairy, wagon, store, hotel, or restaurant, or any other place, is hereby declared to be unsanitary, and its sale forbidden under penalty herein provided.

SEC. 3. All bread, rolls, or buns intended for sale by the piece shall be protected by a covering of sterile waxed paper or similar material and is to be wrapped under sanitary conditions by healthy and clean individuals. The sale of any unwrapped bread, rolls, or buns, whether by bakery, store, hotel, restaurant, or any other place is hereby declared to be unsanitary and its sale forbidden under penalty herein provided.

SEC. 4. Be it further ordained that the violation of any of the foregoing provisions of this ordinance shall be deemed a misdemeanor and upon conviction thereof the offender shall be fined not less than \$2 nor more than \$50 for each and every offense.

SEC. 5. Be it further ordained, that this ordinance take effect from and after its passage, it being a matter of urgency and necessity and the public welfare requiring it.

Meats and Meat Products—Inspection of. (Ord. Feb. 12, 1912.)

SECTION 1. Be it ordained by the board of commissioners of the city of Memphis, that it shall henceforth be unlawful for any person, firm, or corporation to sell, offer for sale, or have in his, her, or their possession or control for sale any meat or meat product, unless such meat or meat product bears the tag or stamp indicative of inspection by the Bureau of Animal Industry, United States Department of Agriculture or "inspected and passed Department of Health, Memphis" stamp or tag.

SEC. 2. Be it further ordained that the department of health in the city of Memphis shall arrange for the inspection of all meats and meat products at the city market house and such other points as the necessity of the service may require and that the superintendent of the health department shall appoint trained and competent men to make this inspection.

SEC. 3. Be it further ordained that the inspectors appointed hereunder shall be empowered to collect an inspection fee for each animal inspected as follows: For each beef, 10 cents; for each hog, 5 cents; for each sheep, lamb, kid, or goat, 5 cents; for each carload of dressed meat, \$2; and under no circumstances shall an inspector stamp or pass any dressed fresh meat (poultry, fish, and game excepted) unless this inspection fee has been paid. All moneys collected under this section shall be paid into the city treasury once a week as other moneys are now paid.

SEC. 4. Be it further ordained that the inspectors appointed hereunder shall give bond in the penal sum of \$1,000 for the proper discharge of their duties and file said bond with the city clerk.

SEC. 5. Be it further ordained that the inspectors appointed hereunder shall have full police power; that they shall be under the direction of the city chemist, to whom they shall report daily.

SEC. 6. Be it further ordained that the ordinance take effect from and after its passage, the matter being one of urgency and necessity and the public welfare requiring it.

Screening—Required for all Buildings. (Ord. Mar. 18, 1912.)

SECTION 1. Be it ordained by the board of commissioners of the city of Memphis that all property within the city of Memphis shall be screened by April 1 of each year and shall remain screened until November 1 of each year; that the said screening shall be done by all persons, firms, or corporations owning said property within the limit of the city of Memphis; that the same shall be done in a thorough and workmanlike manner, and shall include windows, doors, and all openings.

SEC. 2. Be it further ordained by the said board of commissioners of the city of Memphis that the tenants of the property so screened in accordance with this ordinance shall take reasonable and proper care of the screens in the property which they occupy, and shall see that they are put up properly on the 1st of April of each year and taken down with care on November 1 of each year.

SEC. 3. Be it further ordained by the board of commissioners of the city of Memphis that a violation of this ordinance shall be a misdemeanor and shall be punishable by a fine of not less than \$5 and not more than \$50, and that each day the premises are unscreened during the period herein stated shall constitute a separate offense.

SEC. 4. Be it further ordained that this ordinance shall take effect immediately after passage, the matter being one of necessity and urgency and the public welfare requiring it.

MOBILE, ALA.

Bakeries—Construction and Maintenance. (Ord. July 9, 1912.)

SECTION 1. *Be it ordained by the board of commissioners of the city of Mobile, That any place used for any process of mixing, compounding, or baking for sale, or for purposes of a restaurant, bakery, or a hotel, and bread, biscuits, pretzels, crackers, buns, rolls, macaroni, cakes, pies, or any food product of which flour or meal is the principal ingredient, shall be deemed a bakery: Provided, however, That restaurants in which any of the foregoing food products are mixed and baked for consumption in such restaurants only, or in ordinary restaurants, kitchen stoves, or ranges, and in kitchens or rooms in dwellings where any of said food products are mixed and baked in an ordinary kitchen stove or range shall not be considered bakeries within the provisions of this ordinance.*

SEC. 2. *Be it further ordained, That every place used as a bakery and everything connected in any way therewith shall be kept in a clean and sanitary condition. All vehicles from which bread or other bake-shop products are sold shall be kept in a clean condition, and all baskets or other containers in which any of the said products are conveyed through the streets shall be closely covered in a way to exclude dust, flies, and other sources of contamination. All parts of the bakery shall be adequately*

lighted and shall be ventilated by means of windows or skylights or air shafts or air ducts or other mechanical apparatus, if necessary, so as to insure a free circulation of fresh air at all times. Such ventilating construction and equipment shall be of such character that a complete change of air in all parts of the bakery may be made at least four times each hour: *Provided, however,* That it shall not be necessary to ventilate at such times or in such manner that the process of mixing or rising of dough shall of necessity be interfered with or prevented.

SEC. 3. *Be it further ordained,* That every bakery shall be kept free from flies, and the doors, windows, and other openings of every such bakery shall be fitted with self-closing screen-wire doors and wire window screens. The walls and ceilings shall be tight and of such construction as will permit of easy and thorough cleaning, and shall be kept clean at all times. The floor shall be of smooth, tight, and sound construction. All walls and ceilings shall be well painted or whitewashed at all times.

SEC. 4. *Be it further ordained,* That every such bakery shall be provided with adequate plumbing and drainage facilities, including well-ventilated water-closets and impermeable wash sinks on iron supports. No water-closet compartment shall be in or in direct communication with the bakery proper.

SEC. 5. *Be it further ordained,* That no person shall sleep or live in any bakery or in a room where flour or meal used in connection therewith is kept or where the food products made therein are handled or stored. If any sleeping places are located on the same floor with the bakery, they shall be well ventilated, dry, sanitary, and open to inspection. No domestic animal, other than cats, shall be permitted in a bakery or a place where flour or meal is stored in connection therewith.

SEC. 6. *Be it further ordained,* That all workmen or employees while engaged in the manufacture or handling of bakery products in a bakery shall provide themselves with slippers or shoes and a suit of washable material, which shall be used for that purpose only, and shall at all times be kept clean.

SEC. 7. *Be it further ordained,* That cuspidors or impervious material shall be provided and shall be cleaned daily. No employee or other person shall spit or discharge any substance from the nose, mouth, or any other part of the body on the floor, walls, or ceilings of any bakery or place where food products of such bakery are stored. No employee shall either smoke or chew tobacco while engaged in the manufacture or mixing of such bakery products.

SEC. 8. *Be it further ordained,* That no person who has consumption, scrofula, or any venereal disease, or any contagious or infectious disease, or any communicable skin disease shall work in any bakery, and no owner, agent, manager, or person in charge of any bakery shall knowingly require or permit such a person to be employed in such bakery.

SEC. 9. *Be it further ordained,* That all rooms for the storage of flour or meal for use in connection with any bakery shall be dry and well ventilated, and every bakery and room used for the storage of materials and food products in broken packages, in connection therewith, shall be provided with shelves, trays, troughs, bins, cases, and all other appliances for handling and storing the same which will protect such flour and meal from rats, mice, roaches, flies, and other contaminating vermin, and which can and shall be regularly removed and cleaned as often as is necessary. This shall not apply to flour or goods stored or held in original packages.

SEC. 10. *Be it further ordained,* That all operatives, clerks, employees, and all persons who handle the material from which food products are prepared or the finished products shall at all times keep their persons clean.

SEC. 11. *Be it further ordained,* That all wagons, carts, or other vehicles used in the city of Mobile for the delivery or distribution of bread or other bakery products shall be so constructed as to prevent flies, dust, and other contaminating matter from entering into said wagon, cart, or other vehicle, or upon its contents: *Provided,* That any wagon now in use may be closed with curtains, but no new wagons will be permitted

unclosed by paneling and doors. And each wagon shall be provided with a dust and fly proof basket or other such container in which bread or other bakery products shall be transferred from said wagon, cart, or other vehicle to a sanitary show case or other fly and dust-proof container; this last container to be provided by the dealer or retailer: *Provided, however*, that when bread or other bakery products are delivered in small quantities they may be inclosed in a dust and fly proof paper bag or wrapper which must be tightly closed before being deposited in the custody of the purchaser. This section of this ordinance shall apply to all stores, delicatessen or other places from which bread and other bakery products are sold.

SEC. 12. *Be it further ordained*, That the health officer or any authorized inspector or employee of the city of Mobile shall, from time to time, inspect bakeries and have the right at all times to enter any bakery to make inspections and records of the sanitary conditions of any bakery or wagon, cart, or other vehicle operated by any bakery as may be necessary to conserve the health of the people of the city of Mobile; and if such inspection shall disclose a lack of conformity to this ordinance the health officer may require such changes, alterations, or renovations as may be necessary to be done within a reasonable time to make such bakery or wagon, cart, or other vehicle operated by such bakery comply with the provisions of this ordinance; and neglect or failure on the part of the owner, agent, manager, or person in charge of such bakery to meet and comply with the requirements so ordered within the time limit so designated by the health officer of the city of Mobile, shall constitute a violation of this ordinance.

SEC. 13. *Be it further ordained*, That no person, firm, association, or corporation shall sell within the limits of the city of Mobile any bread or bakery products without having first applied for and obtained a permit so to do from the city health officer of the city of Mobile on the 1st day of November of each year succeeding the present year, and shall be renewed on or before the 31st day of October of each year. The permit number shall be conspicuously posted in every bakery, store, or other place from which bread or other bakery products are sold; and if any wagon, cart, or other vehicle is used for the delivery or distribution of bread or other bakery products the permit number shall be painted on each side thereof in figures not less than three inches high.

SEC. 14. *Be it further ordained*, That any person, firm, association, or corporation violating any section of this ordinance shall be punished by a fine not exceeding \$100 for each offense, to be imposed by the recorder of the city of Mobile upon conviction thereof.

SEC. 15. That it shall be the duty of every person, firm, or corporation operating any bakery to have section 7 of this ordinance printed and posted in the bakery proper.

SEC. 16. *Be it further ordained*, That this ordinance shall go into effect on November 1, 1912.

Ice Cream—Production, Care, and Sale. (Ord. July 9, 1912.)

SECTION 1. No ice cream shall be manufactured or stored for sale in any portion of a building which is used for the stabling of horses or other animals, or in any room used in whole or in part for domestic purposes, unless the manufacturing or storage room for ice cream is separated from other parts of the building to the satisfaction of the board of health or city health officer.

SEC. 2. All rooms in which ice cream is manufactured or stored shall be provided with tight walls, floors, and ceiling and kept constantly clean. The walls, floors and ceiling of said rooms shall be of such construction as to permit of rapid and thorough cleaning. The room or rooms aforesaid shall be equipped with appliances for washing or sterilizing all utensils employed in the mixing, freezing, storage, sale, or distribution of ice cream, and all such utensils after use shall be thoroughly washed with

boiling water or sterilized with steam. Vessels used in the manufacture and sale of ice cream shall not be employed as containers for other substances than ice cream.

SEC. 3. All establishments in which ice cream is manufactured shall be equipped with facilities for the proper cleansing of the hands of the operatives, and all persons immediately before engaging in the mixing of the ingredients entering into the composition of ice cream, or its subsequent freezing or handling, shall thoroughly wash his or her hands and keep them clean during such manufacture and handling. All persons shall be dressed in clean, washable outer garments while engaged in the manufacture and handling of ice cream.

SEC. 4. No urinal, water-closet or privy shall be located in the room or rooms mentioned in the preceding sections, or so situated as to pollute the atmosphere of said rooms.

SEC. 5. Ice cream kept for sale in any shop, restaurant, or other establishments shall be stored in a covered box or refrigerator. Such box or refrigerator shall be properly drained and cared for, and shall be kept tightly closed except during such intervals as is necessary for the introduction or removal of ice cream or ice, and they shall be kept in only such locations and under such conditions as shall be approved by the board of health or city health officer.

SEC. 6. Every person engaged in the manufacture, storage, transportation, sale, or distribution of ice cream, immediately on the occurrence of any case or cases of infectious disease, either in himself or in his family or among his employees or their families, or within the building or premises where the ice cream is manufactured, stored, or sold, shall notify the board of health or city health officer and at the same time shall suspend the sale and distribution of ice cream until authorized to resume the same by the said board of health. No vessels which have been handled by persons suffering from such disease shall be used to hold or convey ice cream until they have been thoroughly sterilized under the supervision of some representative of the board of health or city health officer.

SEC. 7. All cream, milk, or skim milk employed in the manufacture of ice cream shall, after receipt by the manufacturer and before use, be kept at a temperature not higher than 50° F.

SEC. 8. No ice cream shall be returned to the manufacturer for whatever cause, nor shall any old or melted ice cream be refrozen for use either by itself or together with fresh mixture.

SEC. 9. All vehicles used in the transportation of ice cream for sale, delivery, or distribution shall be constructed as follows:

(A) Wagons used in the delivery of ice cream may be either open or closed, but shall be kept clean and free from offensive odors at all times. Ice cream transported in such wagons must be packed in tubs with ice and covered in such manner as to prevent contamination by dust, flies, etc.; and such packages must not be opened from the time they leave the place of packing until after delivery.

(B) All vendors' wagons, push carts, or other vehicles shall be provided with waterproof top and with refrigerators of ample capacity to keep contents in a frozen condition at all times, and shall be kept clean and free from offensive odors at all times.

SEC. 10. No person, by himself or by his servant or agent, or as servant or agent of any other person, firm, or corporation, shall sell, deliver, or distribute from wagons, push carts, or other vehicles in the streets, or from open stands, whether on or off the streets of the city of Mobile, any ice cream, sherbet, or other frozen delicacies in any quantity except when each portion sold, delivered, or distributed is wrapped in a vegetable parchment or other sanitary water-proofed paper wrapper as approved by the board of health.

SEC. 11. No person, either by himself or his servant or agent, or as the servant or agent of another person, firm, or corporation, shall deliver any ice cream, sherbet, or other frozen delicacy to any house or place in which there is an infectious disease,

except in a single service paper package, as approved by the board of health or city health officer.

SEC. 12. No person, by himself or by his servant or agent, or as the servant or agent of another person, firm, or corporation, shall sell, deliver, or distribute any ice cream, sherbet, or other frozen delicacy in the police jurisdiction of the city of Mobile without first having obtained a permit to do so from the board of health or city health officer.

To obtain a permit: All persons desiring a permit to engage in the sale, delivery, or distribution of ice cream, sherbet, or other frozen delicacies, shall make application to the chief meat and milk inspector on a blank form prescribed by the board of health for that purpose.

Said application blank shall require among other things the following information, which the applicant shall state fully and explicitly:

1. The full name, nature of the business, and post-office address of the applicant.
2. The exact location of the place from which the applicant obtains his milk and cream, and if said applicant is not a producer of milk or cream, then the name of the person or persons from whom he obtains his milk or cream.
3. The manner in which the applicant intends to dispose of his product.
4. The applicant must agree to abide by the ordinances and rules regulating the manufacture, handling, and sale of ice cream in the city of Mobile, Ala., so far as they affect his business.

SEC. 13. Any person, firm, or corporation who violates any section of the foregoing ordinance shall, upon conviction in the recorder's court of the city of Mobile, be fined not more than \$25 for each offense and may have his license and permit both revoked at the will of the board of health.

SEC. 14. This ordinance is to go into effect on July 15, 1912.

MONTCLAIR, N. J.

Nuisances—Certain Conditions Declared to be. (Ord. Bd. of H., June 25, 1912.)

Article 2, section 1, of an ordinance entitled "An ordinance establishing a sanitary code for the town of Montclair," passed April 9, 1907, is hereby amended by adding the following to the specific acts, conditions, and things therein enumerated and declared to constitute nuisances:

(k) The accumulation of manure, garbage, or anything whatever in which flies breed.

(l) The accumulation of manure or any form of filth that has not been so treated as to act as a repellant to flies. (The presence of fly eggs or maggots or flies will be cient evidence that such accumulation has not been properly treated.)

(m) Any stable that is not provided with a water-tight floor, which floor must be properly graded, trapped, and drained to a sewer, or cesspool if no sewer is available.

(n) Any privy vault that is not water-tight as well as fly-proof. (All existing privy vaults on streets in which there is no sewer must be changed within 30 days to comply with this regulation, or else a dry-earth system must be installed, in accordance with the rules of the board of health.)

(o) Any privy vault that is filled to within 1 foot of the top of the vault.

(p) Any privy that is not of substantial construction, that is not fly proof, that is not provided with a self-closing seat or seats, and that does not comply with all rules of the board of health.

(q) Any cart, tank, or barrel used in removing the contents of privy vaults or cesspools that is stored or cleaned within 300 feet of any dwelling.

(r) Any premises that are not provided with a suitable water-closet or privy vault for all persons working thereon.

(s) Any temporary privy vault the contents of which are not kept covered at all times.

Article 7, section 2, of the said ordinance is hereby amended by removing the clause "(fruit and vegetables excepted)."

MORRISTOWN, N. J.**Sewers—Connections to be Made with all Occupied Buildings. (Ord. Sept. 10, 1912.)**

SECTION 1. Every owner of a dwelling house, store, flat, apartment house, tenement house, barn, stable, or other building used or occupied by human beings shall construct a house lateral extending from said building to the main sewer in the street in front of the property upon which said building is situated, or such other place as shall be directed by the sewer committee of this board, within one month after the date of service by the street commissioner of a written notice so to do. In case the owner does not reside on the premises in question, service on the tenant shall be sufficient.

The work shall be done in conformity with the provisions of the ordinance to which this is a supplement, and the penalties prescribed therein shall apply in case of failure to comply with the terms of this ordinance.

MOUNT VERNON, N. Y.**Communicable Diseases—Notification of Cases—Quarantine of Diphtheria. (Reg. Bd. of H., Nov. 25, 1912.)**

Resolved, That section 55, article 7, of the sanitary code of the city of Mount Vernon, N. Y., be, and the same hereby is, amended as follows:

"SEC. 55, ART. 7. It shall be the duty of every physician practicing in the city of Mount Vernon, N. Y., to report to the health officer all cases of infectious and contagious or communicable diseases, and shall take the primary and secondary cultures from the throat of all cases of diphtheria before the quarantine shall be removed. No secondary culture shall be taken before the expiration of at least 18 days, and if found negative a second may then be taken; providing the two secondary cultures taken three days apart show no diphtheria bacilli the quarantine will be removed."

Nuisances—Noises Prohibited. (Ord. Bd. of H., Aug. 12, 1912.)

Article 15 of the sanitary code is hereby amended, adding thereto section 103-A, as follows:

"No corporation, association, person, lessee, owner, or occupant of any factory shall be allowed to ring bells or blow whistles, or produce other noises which shall disturb the quiet or repose of anyone in the vicinity at any time of the day or night."

NASHVILLE, TENN.**Milk—Production, Care, and Sale. (Ord. Oct. 25, 1912.)**

SECTION 1. No person himself, or by his servant, agent, or as his servant, or agent of another, shall sell or deliver, or have in his possession or custody with intent to deliver—

- Milk not allowed.*—(a) Milk in which water or any foreign substance has been added.
- (b) Milk which has been wholly or partially skimmed.
- (c) Milk not of standard quality.
- (d) Milk concerning which any misrepresentation has been made.
- (e) Milk produced by diseased cows, or by cows which have been fed on any unwholesome food or contaminated water.
- (f) Milk which has been produced, stored, handled, or transported in any improper or unclean or insanitary manner.

All of the above subsections are subject to conditions hereinafter stated.

Standard quality.—SEC. 2. *Be it further enacted*, That for the purpose of this ordinance the word "person" shall be construed to mean individual, partnership, or corporation,

and the word "milk" shall mean milk, cream, evaporated or condensed milk, so far as may be applicable. The expression "milk" not of standard quality shall mean having less than 9 per cent of solids not fat, and less than 3.5 per cent of milk fat, and cream having less than 18 per cent of milk fat, skimmed milk having less than 9 per cent of milk solids, exclusive of fat, shall be adulterated; and nothing in this ordinance shall be construed to prohibit the sale of skimmed milk, or under-standard milk, if the receptacle containing the same is plainly marked in manner and form to be hereinafter stated.

Modified milk.—Nothing in this ordinance shall be construed to prevent the sale of modified milk in bottles, each holding a single feeding, into the side of which bottles the name of the person who manufactured or prepared the aforesaid milk shall be blown, together with the words "modified milk."

Nothing in this ordinance shall apply to evaporated or condensed milk contained in hermetically sealed packages, labeled distinctly with the name of the manufacturer or person who prepared or put it up, and the brand under which it is made or sold.

Certified milk.—Certified milk shall mean milk produced under the regulations and supervision of the milk commission of the Nashville and Davidson County Medical Society, said commission having certified that its requirements have been complied with. For the purpose of this ordinance, cows which react to the tuberculin test and fail to pass a satisfactory physical examination shall be considered diseased.

Below standard.—Milk produced at a dairy which scores on the National Dairy Division score card below 60, and milk sold by or from a city milk plant or depot which scores on the National Division score card below 70, shall be considered as produced and handled in an improper, unclean, and insanitary manner. Milk from a cow 15 days before calving, and 10 days thereafter shall be regarded as insanitary.

Insanitary.—For the purpose of this ordinance, milk having more than 200,000 bacteria per cubic centimeter shall be regarded as insanitary. When milk is bought or sold by the quart or gallon, the gallon of 231 cubic inches and the quart of 57.75 cubic inches shall be the standard, and shall be so understood.

License to sell milk.—SEC. 3. *Be it further enacted,* That every person, before selling milk, or offering it for sale, or before conveying the milk in carriages or otherwise for the purpose of selling or delivering it in the city of Nashville, shall be licensed by the board of health of the city of Nashville. The application of license shall be in writing on a blank furnished by the health officer of the board of health in the city of Nashville, and when properly filled out and accepted by the health department, the said board of health shall issue license in the name of the owners of carriages or other vehicles, or stores, or booths. They shall be, for the purpose of this ordinance, conclusive evidence of the ownership of the business and shall not be sold, assigned, or transferable. Each license shall contain a serial number, and the name, residence, place of business of the license, and to each owner of carriage or vehicle, used for the transportation of milk, the board of health shall at the time of issuing said license issue a tin sign so indented by means of a stencil cutter as to show the number of the vehicle, and the day of the month and year that said license shall expire; provided that the tin sign furnished by the health officer shall not be of the same size and shape for any two of the consecutive years. Said signs shall be permanently placed by the owner or keeper of the vehicles on the right side of it and in some conspicuous place.

It is further provided that each person handling milk for sale in any manner other than vehicle shall have posted in his place of business, in a conspicuous place, said license issued by the board of health.

Sanitary bottles.—SEC. 4. *Be it further enacted,* That on and after the passage of this ordinance all milk delivered to private consumers shall be delivered in glass or sanitary bottles approved by the board of health, and that the cap used for such bottles shall have indicated thereon whether the milk be "Standard," "Below standard," or

"Skimmed milk," and no milk shall be bottled upon any wagon; and it shall be a violation of this ordinance for any dairyman to use any bottles bearing the name of any other dairyman save that of his own.

Delivery of milk.—SEC. 5. *Be it further enacted,* That nothing in this ordinance shall prevent the delivery of milk in quantities in cans, either at market, depots, hotels, restaurants, or where milk is sold to be consumed on the premises where sold; but no milk shall be dipped from cans, or in any manner removed from vessels, except where milk is permitted by this ordinance to be sold in wholesale quantities; and on each can where milk is so contained there must be designated on said cans the quality of milk therein contained—namely, "Standard," "Below standard," or "Skimmed milk." And pasteurized milk offered for sale shall be under same supervision as all other milk offered for sale in the city of Nashville.

Must not leave bottles.—SEC. 6. *Be it further enacted,* That no one shall leave any bottles at a dwelling where any contagious or infectious disease exists, but where milk is delivered at such dwellings it shall be poured from the bottles into a vessel provided by the family.

Must not sell milk.—When any person engaged in the production or distribution of milk is suffering from contagious or infectious disease, or when disease exists among his employees or their immediate associates, or within the building used in any way in the milk business, no milk shall be sold or delivered from such a dairy or milk establishment except by permission of, and in the manner prescribed by, the board of health.

Clean bottles.—SEC. 7. *Be it further enacted,* That no consumer of milk shall place, or cause to be placed, in any vessel used in the production, sale, or delivery of milk, any offal, swill, or other offensive material; nor shall he return, or cause to be returned, any milk can or bottle which is in an unclean or offensive condition. Be it further provided, that all bottles or vessels, before being refilled, shall be thoroughly clean, and scalded where sterilizing plants have not been installed. Where sterilizing plants have been installed, all bottles must be sterilized.

Milk tickets.—SEC. 8. *Be it further enacted,* That where tickets are sold by dairymen to consumers, same shall be in book form and detachable, and all detached tickets collected by dairymen shall not again be offered for sale, but destroyed.

Sections repealed.—SEC. 9. *Be it further enacted,* That sections 902 and 905 of McAlister & Smith's Digest of Laws of Nashville be, and the same are hereby, repealed, and that an ordinance passed June 8, and approved on the same date by the mayor, for the purpose of establishing directions for scoring dairies, be, and the same is hereby, amended by providing that wherever the figure 65 as a minimum for scoring is used the same shall hereafter be 60.

Penalty for interfering.—SEC. 10. *Be it further enacted,* That whoever violates any provision of this ordinance, or any regulations made under its authority, or whoever hinders, obstructs, or interferes with the board of health, or any of the inspectors or assistants under said board, in the discharge of their duties, shall be punished by fine of not less than \$10 nor more than \$50.

SEC. 11. *Be it further enacted,* That this ordinance shall take effect 60 days after its passage, the welfare of the city requiring it.

Milk—Cows to be Tested with Tuberculin, and Inspected. (Ord. Oct. 25, 1912.)

Tested and examined.—SECTION 1. That it shall be unlawful for any person, firm, or corporation to sell, or offer for sale, any milk within the corporate limits of the city of Nashville unless the owner, proprietor, or agent shall have said dairy herd tested with tuberculin every 12 months, and an examination of their physical condition at any time that the city health officer may direct. And in case of new cows being added to the herd, said newly acquired cows shall also be tested and examined before their milk is sold or offered for sale.

New cows.—SEC. 2. *Be it further enacted,* That when any new cows have been added to the herd of such owner, corporation, or proprietor, it shall be the duty of such owner, proprietor, or agent to notify in writing the city health officer of the addition of such new cows.

Tuberculin test.—SEC. 3. *Be it further enacted,* That it shall be unlawful for any person, firm or corporation to sell or offer for sale any milk within the limits of the city of Nashville from any herd in which they have knowledge or notice that cows have reacted to the tuberculin test. It is the expressed intention of this act that it shall be immaterial whether this knowledge or suspicion of the condition of such cows come to such owner or proprietor or agent by or through an official test, the fact of knowledge or suspicion alone being necessary. Such suspicious or reacting cows shall be at once segregated.

License revoked.—SEC. 4. *Be it further enacted,* That any violation of this ordinance is hereby declared a misdemeanor, and, upon conviction, shall subject the violator to a fine of not less than \$5 nor more than \$50, and in addition, upon conviction, that the license to sell, or offer for sale, milk in the city of Nashville, may be revoked by the city health officer.

City tuberculin dairy inspector.—SEC. 5. *Be it further enacted,* That the office of city tuberculin dairy inspector is hereby created; that his salary shall be not less than \$1,500 nor more than \$1,800 per annum, payable monthly out of the funds of the health department; that said inspector shall be appointed by the board of public works; that said inspector shall be a graduate of a regularly recognized veterinary college, and he shall be of good standing in his profession; he shall be under the control and direction of the city health officer. It shall be his duty to make a tuberculin test every 12 months of all dairy herds from which milk is being sold or offered for sale in the city of Nashville, and that a regular physical examination shall be made of such herd to ascertain their health condition; that upon such inspection he shall issue a certificate, in duplicate one of which shall be returned to the health officer, the other furnished to the owner, person or agent in charge of such herd; said certificate shall set out the total number of cows in the herd, number tested with tuberculin, number of reacting cows, number of suspicious cows, the number the physical condition of which is unsatisfactory, and what the condition is; and in case where new cows have been added since the last test, the number of new cows and the date. For the guidance of said inspector the following form of certificate is suggested:

Number.....cows in herd.
 Number.....cows tested with tuberculin.
 Number.....cows reacting.
 Number.....cows suspicious.
 Number.....cows physical condition unsatisfactory.
 Number.....cows added since last test; date of addition.
 Total

The tuberculin used by said inspector shall be furnished by the health department of the city.

SEC. 7. *Be it further enacted,* That the ordinance passed April 5, 1909, and approved April 12, 1909, is hereby repealed.

SEC. 8. *Be it further enacted,* That this ordinance take effect upon January 1, 1913, the welfare of the city requiring it.

Ice Cream—Production, Inspection, and Sale. (Ord. July 12, 1912.)

SECTION 1. That on and after the passage of this ordinance, ice cream offered for sale in Nashville, as such, shall be of the following standard:

Standard ice cream.—A frozen product made from cream and sugar, with or without added flavoring, and containing not less than 8 per cent of milk fat, and the addition

of not more than seven-tenths of 1 per cent of gelatine or other harmless "stiffener;" and it is further known that any artificial coloring matters may be used, but where used must be declared upon the label of the package. For the purpose of this ordinance, ice cream shall be construed to mean "Frozen" products of not less than 8 per cent of butter fat, nor more than seven-tenths of 1 per cent of gelatine; and any product offered for sale on the markets of the city of Nashville not coming up to this standard shall be in violation of this ordinance and subject to the penalties hereafter attached.

Milk ice.—SEC. 2. *Be it further enacted,* That any person, firm, or corporation dealing in, handling, selling, or offering for sale any frozen product not coming up to the standard as above mentioned shall so designate the same as "Milk ice."

Inspection of cans.—SEC. 3. *Be it further enacted,* That all cans containing any grade of cream, whether ice cream or milk ice, shall be subject to inspection by the properly constituted authorities of the health department, and any can worn, or the coating in a rusted condition, shall not be subject to use if so directed by the inspector. But nothing in this ordinance shall be construed to prevent the sale of ice cream as above defined, or milk ice when properly designated as such.

Labeling and posting.—"That all ice cream, milk ice, or sherbet offered for sale by manufacturers or dealers in Nashville shall be so labeled, giving the ingredients in each, so as to clearly define and set out under what head the same is offered, also giving the correct analysis of the contents. That all retail dealers offering any frozen product not up to the standard of ice cream, as defined in this ordinance, shall have posted in his place of business, in a conspicuous place, a statement that the products offered by him for sale are of a quality less than that defined as ice cream."

Fines for violation.—SEC. 4. *Be it further enacted,* That any violation of the provisions of the sections of this ordinance shall be considered a misdemeanor, and any person, firm, or corporation violating such shall be subject to a fine of not less than \$10 and not more than \$50.

SEC. 5. *Be it further enacted,* That this ordinance take effect from and after its passage, the welfare of the city requiring it.

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