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#### LEPROSY.

ITS TREATMENT IN THE PHILIPPINE ISLANDS BY THE HYPODERMIC USE OF A
CHAULMOOGRACOL MIXTURE

There is being published as a supplement to this week's issue of the Public Health Reports a report on the treatment of leprosy by the hypodermic use of a chaulmoogra-oil mixture. The author is Victor G. Heiser, surgeon, United States Public Health Service, and Director of Health for the Philippine Islands. The report was presented at the eleventh annual meeting of the American Society of Tropical Medicine, held in Boston, Mass., May 29 and 30, 1914, when it was read by title. The report itself has not previously been published. It is of special interest to all concerned with the care or treatment of lepers because of the marked improvement observed in a number of the patients treated.

The report itself contains detailed histories of the cases and many illustrations. The introductory paragraph and the summary and conclusions are here given because of their general interest.

In the United States Public Health Reports of September 5, 1913, two cases, and in the United States Public Health Reports of January 2, 1914, two additional cases, or a total of four, were reported as having been apparently cured of leprosy, and to have remained cured for a period of over two years. The first two cases were treated with a mixture of chaulmoogra oil, camphor, and resorcin, and in addition they received at irregular intervals a vaccine prepared in a number of different ways from a strain of so-called leprosy cultures of Clegg. The other two cases received only hypodermic injections of the chaulmoogra-oil mixture, no vaccine being used. The clinical records for the above cases, beyond establishing the diagnosis and that they were microscopically negative after treatment, were incomplete. With the hope, therefore, of having more satisfactory data available, 12 cases, which included the different types of leprosy, were placed under treatment February 21, 1912, with the same

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chaulmoogra-oil mixture as was used in the cases already reported as apparently cured. The object of this paper is to present the results that were obtained.

### Statistical Summary of Cases.

Cases placed under treatment	12
Cases taking treatment throughout period	9
Cases apparently recovered and microscopically negative	1
Cases in which clinical evidence of leprosy practically disappeared	4
Cases showing only slight evidences of improvement	1
Cases declining to take prescribed treatment	3

#### NET RESULTS.

	Per cent.
Apparent cures	. 11. 11
Apparent clinical recoveries	
Showing marked improvement	
Showing only slight evidence of improvement	. 11. 11

### Brief Review of the Steps Leading to the Present Treatment.

It has been customary in the Philippine Islands to try any treatment for leprosy that came to the attention of the bureau of health and in the employment of which we could satisfy ourselves that no harm would be done to the patient. We have always been very fortunate in having volunteers for any form of treatment which it was proposed to try. Most of the remedies had no noticeable effect. However, some apparent cures have resulted from time to time with the different treatments used. For instance, several lepers were apparently cured by the use of the X-ray; others were apparently cured by the administration of crude chaulmoogra oil by mouth, but regardless of the treatment used the disease always returned before the expiration of a year. In view of this experience, it was deemed advisable to wait for a period of two years before reporting apparent That a period of two years, or perhaps even a longer time, should elapse before a case may be considered as cured is well illustrated by Case I. Reference to the microscopical record shows that this case was negative from May 19, 1913, to February, 1914. April 15, 1914, it was positive again, and this in spite of the fact that the physical signs of leprosy have not returned.

Chaulmoogra oil by mouth has been used at the San Lazaro Hospital since the early years of American occupation of the Philippine Islands. In 1907 our attention was directed to the success which was had by Dyer, of New Orleans, in the treatment of leprosy with chaulmoogra oil. In 1908 a conference was had with him and through his courtesy Dr. Hopkins showed us the cases that had been treated by Dr. Dyer's method at the Iberville Parish Leper Colony, as well

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as the practical details for administering the oil, the strychnine and the sodium bicarbonate baths.

Cases were soon afterwards treated at the San Lazaro Hospital, Manila, by Dyer's method and much more success was had than formerly. Unfortunately, however, on account of the great nausea which was produced, very few patients were able to take the oil for a period of more than a few months. Every effort was then made to find a way by which the oil might be given without causing this untoward effect. Various preparations of the oil in which the emetic principle had been removed were tried, but these apparently had no influence on the disease. Emulsions of different kinds were prepared. Capsules were coated with various substances with the idea of having them pass through the stomach unaltered, but nausea continued to occur and scarcely anyone could be induced to take chaulmoogra oil for a longer period than three months on account of the nausea. The few who persisted beyond this period usually showed great improvement and a few apparent cures took place. Enemas of chaulmoogra oil were also tried, but they had no apparent influence on the disease.

A review of the literature showed that the oil had been used hypodermically. That method was then tried, but great difficulty was had owing to the failure of the oil to be absorbed. To overcome this difficulty the Merck Co. suggested that chaulmoogra oil might be combined with ether or camphor. The suggestion was put into effect and it was found that camphor gave the best results. It then occurred to Dr. Mercado, the house physician at the San Lazaro Leper Hospital, to combine the camphor with the resorcin prescription of Unna. The mixture was prepared as follows:

Chaulmoogra oil	60
Camphorated oil	
Resorcin grams	4
Mix and dissolve with the aid of heat on a water bath and then filter.	

Soon after this mixture was used hypodermically over a period of several months, noticeable improvement took place in the appearance of the lesions and in the general health. The treatment was irregularly used on a number of cases. Among others, two lepers took it who had previously been treated without success with a vaccine made with bacilli grown in accordance with the method of Clegg. These two cases recovered early in 1911 after a few months' treatment and apparently remained completely cured for a period of two years, when they were discharged from the hospital on probation. Later, two additional cases recovered that had no other form of treatment except the hypodermic injections of the chaulmoogra oil mixture, from which it seems reasonable to infer that the vaccine had had no effect in the first two cases.

#### Kind of Oil Used.

On account of the question raised recently in a number of medical journals as to the genuineness of much of the chaulmoogra oil on the market at present, a sample of oil was purchased in the open market of Manila and a sample of oil was secured from the Indian Forests Economic Products Co. (Ltd.), of Chittagong, India. Both of these samples were sent to the bureau of science for analysis, with the following result:

	Standard.	Indian.	Stock.
Specific gravity  Ref. index Sap. number Hanus iodine No	1. 478 213. 0	(at 30° C.) 0.9466 1.478 212.9 102.2	(at 30° C.) 0. 9543 1. 478 216. 0 103. 5

There is little choice, both oils being close in their constants to the standard oils.

A. H. Wells, Analyst.

H. C. B.

The oil used in the treatment of the cases reported in this paper was that referred to in the foregoing analysis report as "stock."

Experience with chaulmoogra oil at San Lazaro Hospital, when administered by mouth, has shown that the crude oil is much more efficacious than the refined product. When used hypodermically, there is apparently no difference whether the crude or the refined oil is used, but accurate data with regard to this point are not yet available.

#### Details of Treatment.

The injections are usually made at weekly intervals in ascending The initial dose is 1 c. c., and this is increased to the point of tolerance. Much difference exists among the patients as to the amount of the mixture which they are able to take. In some cases a few cubic centimeters produce marked reactions in the lesions, accompanied by fever and cardiac distress. Sometimes it is better to reduce the amount of the dose and inject at more frequent inter-The object sought is so to regulate the dose as to prevent reactions of too violent a character. Quicker results are also apparently obtained when it is possible to inject the mixture into large leprous deposits or to divide the dose by injecting it into a number of smaller infiltrations. Experience so far leads to the inference that with additional study the prospects seem fair for greatly improving upon the results that are obtained at present. Attention is drawn to the fact that no strychnine was used. Many writers have regarded strychnine as an essential part of the chaulmoogra oil treatment. Saline purgatives are freely employed. Two per cent hot sodium bicarbonate tub baths are prescribed every other day. Those who take prolonged baths regularly seem to improve more rapidly than those who do not.

#### Scabies and Leprosy.

Attention is drawn to a point in the foregoing histories: Of the nine cases under discussion five, or 55 per cent, were afflicted with scabies prior to the appearance of the leprous lesions. The writer has had an opportunity to examine over 8,000 cases of leprosy, and while he has no accurately recorded data to cover this point in all of the cases, yet he has often been struck with the frequency with which cases of leprosy either have scabies at the time the patients come under observation or who give histories of having had scabies.

#### Conclusion.

The present stage of the development of the treatment herein described does not warrant a claim that anything like a specific for leprosy has been found, but experience does show that it gives more consistently favorable results than any other that has come to our attention, and it holds out the hope that further improvement may be brought about. It produces apparent cures in some cases, causes great improvement in many others, and arrests the progress of the disease in almost every instance. We have on hand at present over 20 persons who have become microscopically negative since they began the treatment. The treatment is apparently equally efficacious in all forms of the disease; that is, the tubercular or hypertrophic, the anæsthetic, and the mixed. A series of cases is now undergoing the treatment for the purpose of more accurate study of its effect in the different forms of the disease and whether any difference exists as to sex. Experience also shows the great desirability of further trial in the hands of other workers in different parts of the world, with the hope that improvement may result. Finally, it is always important to remember that there are many treatments for leprosy which apparently cause some improvement, and it not infrequently happens that when cases of leprosy are placed under better hygienic conditions and have hospital care, or for other reasons not understood, the disease is often arrested, in a few instances improvement results, and that apparent cures may take place without any treatment.

#### DRUG INTOXICATION.

#### AN ECONOMIC WASTE AND A MENACE TO PUBLIC HEALTH.

By M I. Wilbert, Technical Assistant, Division of Pharmacology, Hygienic Laboratory, United State
Public Health Service.

It has been estimated that more than 200,000 persons die annually in the United States from so-called degenerative diseases, and the mortality statistics compiled by the Census Bureau show that in the registration area there has been an increase of more than 100 per

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cent in the deaths from diseases of the kidneys, heart, and blood vessels during the past 30 years.

While it is to be expected that the gradual decrease in the general mortality rate, particularly the decrease n deaths from readily preventable diseases like typhoid fever and smallpox, would tend to lengthen the average human life, and thus add to the number of deaths from these so-called degenerative diseases in advanced years, mortality statistics show that the greater proportion of the increase in the death rate from diseases of the kidneys, heart, and blood vessels has been among persons who should be and are generally considered to be in the prime of life. This great increase in the mortality of persons between 40 and 60 years of age, from diseases characteristic of senility, constitutes a deplorable and unnecessary economic loss that is well deserving of careful and comprehensive study.

For many years it has been accepted as fact that changes in the natural resistance of the human body may be and are brought about by intoxications such as are produced by alcohol, tobacco, narcotic drugs, and the various occupational poisonings that are attracting such widespread attention at the present time. These several sources of intoxication have, however, long been recognized and considerable attention, time, and thought have been devoted to the study of their possible untoward effects. Their harmfulness was generally well known and some effort made to combat their influence even before the end of the eighth decade of the previous century, from which period the steady and somewhat rapid rise in mortality from degenerative diseases appears to date.

An important source of intoxication to which altogether too little attention has as yet been given is sug ested by a comparative study of the statistics published in the Thirteenth Census of the United States, in connection with the remarkable increase in the manufacture and inferentially, therefore, in the consumption of materials used as medicines. The paragraph relating to patent medicines and compounds and druggist's preparations shows that during the 60 years for which figures are obtainable the values of products of this type at the manufacturing establishment increased from \$3,863,815 in 1849 to \$141,941,602 in 1909. An even more impressive suggestion is presented by the appended table showing the increase in the number of establishments engaged in the manufacture of commodities of this type, the cost of the materials used, and the value of the products at the manufacturing establishment, compared with the increase in population of the United States during practically the same period of time.

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Number of establishments engaged in the manufacture of patent medicin:: and druggis: reparations, the cost of materials used and the value of the product as manufactured compared with the population of the United States, exclusive of outlying possessions, during the corresponding period.

Year.	Number of establish- ments.	Cost of material.	Value of product.	Population of United States.	Year of census.
1909	3,642	\$50, 375, 665	\$141,941,602	91, 972, 266	1910
1899	2,154	31, 949, 890	88,790,774	75, 991, 575	1900
1889	3,089	15, 571, 187	43,940,120	62, 947, 714	1890
1879	620	7, 906, 138	16,885,498	50, 155, 783	1880

<sup>1</sup> Thirteenth Census of the United States, 1910, v. 8, pp. 451-452, and v. 1, p. 126.

Thus it appears that while the increase in population of the United States from 1880 to 1910 was approximately 83.3 per cent, the increase in the value of patent medicines and related products was 740.5 per cent. In other words, while the population of the United States was less than doubled, the value of the medicines manufactured and consumed was increased ninefold. The cost of the material to the manufacturer was seven times greater in 1909 than in 1879, and the value added by manufacture was eleven times greater in 1909 than it was These figures, given above, high as they are, represent but a minor portion of the expenditures by American people for medicines of various kinds. Many, if not all, of the chemicals used as medicines are made in manufacturing establishments other than those included in the above enumeration, and other materials, particularly crude drugs and the finer grades of chemicals, are imported from foreign countries. The table of imports for consumption in the United States for 1913 includes drugs, chemicals, and other products used as medic ne to the value of more than \$100,000,000. It has been conservatively estimated that the people of the United States expend annually upward of \$500,000,000 for medicine, and that by far the greater bulk of the medicine purchased is consumed haphazardly and not under the direct supervision of experts whose knowledge would tend to prevent harmful intoxication and untoward results from the ingestion of potent and in many instances dangerously harmful preparations.

The relative quantities of some of the products imported are shown in the appended tables, compiled from the list of imported merchandise entered for consumption in the United States, issued by the Department of Commerce. The first of these tables shows the number of pounds of some of the more widely used botanical drugs imported into the United States during the years 1909 to 1913, inclusive, and the second table reflects the quantities of some of the more widely used medicinal chemicals entered for consumption during the same period.

Quantity of some of the more widely used botanical drugs imported into the United States during the years 1909 to 1913, inclusive.

	1909	1910	1911	1912	1913
Aloes Asafetida. Balsam of Peru Benzoin. Buchu. Cinchona. Copaliba Cubebs. Gentian Ipecac Jalap Nux vomica. Sarsaparilla Senna.	42, 335 25, 843 69, 146 3, 502, 385 234, 257 87, 050 1, 485, 389 35, 166 66, 096 1, 666, 957	Pounds. 944,007 95,536 50,363 55,634 130,644 3,305,894 208,566 104,713 1,177,433 36,261 199,905 2,738,662 2,738,662 2,564,452	Pounds. 980, 205 114, 686 37, 910 98, 366 106, 345 4, 136, 354 119, 014 1, 537, 919 27, 654 230, 679 4, 330, 402 379, 091 3, 063, 275	Pounds. 666, 229 138, 066 47, 862 94, 733 181, 131 181, 132 194, 735 111, 357 1, 585, 612 41, 627 119, 211 2, 427, 187 4, 427, 187 3, 164, 003	Pounds, 909, 279 134, 579 48, 996 105, 967 105, 310 3, 329, 973 206, 447 166, 307 1, 796, 928 54, 648 277, 275 2, 306, 735 301, 308 2, 634, 117

Quantities of some of the more widely used medicinal chemicals entered for consumption in the United States during the years 1909 to 1913, inclusive.

•	1909	1910	1911	1912	1913
Acid:	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
Benzoic		364, 650 416, 842	502,878 343,094	470,004 276,496	863,015 362,400
BoracicCarbolic		4,507,693	4,371,014	5, 686, 704	8, 345, 631
Citric	243,010	142,001	97,847	67,332	8,677
Salicylic	1,988	64, 531	32,876	28, 769	31,844
Tartaric	124,774 1,950,620	104, 457 1, 946, 805	331,538 1,917,202	105,311 1,843,443	78, 942 2, 015, 318
Aniline salts	6, 130, 517	5,870,905	5, 133, 723	4,831,075	4, 976, 108
Casseine	149,599	60,463	57,025	43,859	59,773
Camphor	2, 421, 023	3,519,233	4, 218, 430	2,404,140	3,941,170
Cinchona bark alkaloidsIodine	12,330,304	1 3, 012, 196 771, 090	1 3, 102, 194 210, 467	1 3, 044, 238 497, 823	1 3, 237, 994 351, 296
Lime, citrate of	3,917,274	4, 114, 256	5, 219, 544	5,903,501	5, 526, 954
Tartar and cream of tartar	32, 121, 394	28, 415, 045	29, 312, 257	23, 746, 330	29, 548, 388

1 Ounces.

When one considers the potential possibilities for harm inherent in practically all drugs and preparations it is astonishing that attention has not earlier been directed to the need for careful, systematic study of the possible untoward influences of the several drugs used.

The frequent, excessive or long-continued use of any one of a number of inorganic compounds, particularly the soluble salts of mercury, lead, uranium and related metals, has been shown to be irritating to the kidneys and capable of producing chronic lesions. The constant ingestion of many of the otherwise innocuous inorganic salts when contaminated by traces of arsenic or lead may, and undoubtedly will, produce toxic manifestations.

Many organic compounds have also been found to produce marked changes or secondary manifestations. The changes produced by alcohol and the narcotic drugs, have been fairly well recognized and considerable data are also available regarding the harmful effects of the coal-tar analgesics, the several hypnotics, and a number of aldehydes and related products.

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All of the important or active medicaments must of necessity have harmful influences when taken indiscriminately or for a continued length of t me. It has been very properly asserted that the activity of drugs may vary to an infinite number of degrees. It may be accepted as fact that whenever the activity is sufficient to produce a decided therapeutic effect in disease it is also sufficient to produce a deleterious effect when improperly used, either as to time or quantity. In other words, useful drugs are of necessity poisonous substances which tend to derange normal processes of the human organism and many of them must of necessity be extreme y injurious to the various organs of the body if used at all liberally for any appreciable length of time.

Quinine, for instance, the alkaloid of cinchona bark, is still used in rather large quantities and as such or in the form of bark was imported into the United States, in 1913, to the total of 2,065,000,000 average doses, enough to give every man, woman and child from 25 to 30 doses each year. This drug has long been known to produce a characteristic form of intoxication accompanied by roaring in the ears, impairment of hearing, dizziness, headache and nausea. Gastrointestinal disturbances are also observed at times and the ingestion of even small doses for a considerable period may be followed by gastric catarrh, and its sequelæ. The administration of larger doses has been followed by marked and at times persistent deafness and even blindness.

The habitual ingestion of coal-tar analgesics, which form paraaminophenol, is followed by a train of symptoms including destructive changes in the blood, the production of methemoglobin, a degeneration of the heart muscle, cardiac failure, cyanosis, abnormally low temperature, and collapse.

The salicylates have many of the properties of coal-tar analgesics and are used quite extensively as sedatives for the relief of headache and neuralgic pains. They are known to have a deleterious influence on the digestive function and in larger doses or when long continued are frequently accompanied by symptoms of cinchonism similar to those produced by quinine. The salicylates may also have a depressing influence on the central nervous system accompanied by convulsions, slowing of respiration, and collapse from circulatory depression.

Pontius (J. Am. M. Assoc., v. 62, p. 797) reports seeing a nervous woman, age 45, who on the advice of a friend had for the past year taken 5-grain tablets (1 per dose) from 3 to 10 times daily for neuralgic pains. Her mental condition when seen by the physician was similar to that of one addicted to the morphine habit.

The coal-tar hypnotics like sulphonal and trional may cause acute symptoms of poisoning accompanied by ataxia, nausea, gastric pain, irritation of the kidneys, albuminuria, and nephritis.

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The mental state induced by the long-continued use of sulphonal and its congeners in full doses is said to be a badly disturbed one with derangement and even dementia.

The occurrence of acute intoxication in patients from the ingestion of various drugs is frequently ascribed to idiosyncrasy. As yet comparatively little is known regarding the principles underlying this occasional manifestation of undue activity, but it is probable that idiosyncrasy, so called, is in reality due to the synergistic action of several compounds taken at the same time or to the combined action of products formed in the human body with a compound taken as medicine.

In connection with some drugs, the use of which is long continued, the body may develop a tolerance or diminished sensitiveness to their action. This appears to be particularly true of narcotics and of many of the cathartic drugs. These lead to the habitual consumption of drugs, and their use once commenced is fraught with many difficulties. That the use of the so-called laxative drugs is not an entirely negligible factor is well shown by the table presented above, which enumerates the quantities of a few of the drugs of this type that are consumed annually in this country.

The amount of money expended annually for drugs and medicines in this country is out of all proportion to the real need or requirements of the people, and to this extent at least the unnecessary use of medicines may be considered an economic waste.

Enough has been said to demonstrate that medicines if at all deserving of the name must of necessity be harmful when misapplied or when used for any considerable length of time without a due appreciation of their possible secondary influences and the chronic derangements that may follow in their wake.

The rapid increase in mortality from degenerative diseases and the fact that this increase is greatest in persons who should be in the prime of life would warrant making a careful study of the problems involved with the view of directing attention to the causative factors of the degenerative processes.

## PLAGUE-ERADICATIVE WORK.

#### CALIFORNIA.

The following report of plague-eradicative work in California for the week ended September 26, 1914, has been received from Surg. Long, of the United States Public Health Service, in charge of the work:

SAN FRANCISCO, CAL.	PORT COSTA, CAL.
Number of premises inspected         1,733           Number of premises destroyed         11           Number of nuisances abated         189           Number of poisons placed         33,200           Average number of traps set daily         1,734           EATS COLLECTED AND EXAMINED FOR PLAGUE           Collected         464           Found dead         3           Examined         305           Found infected         None	Number of rats trapped in warehouses.
Mus norvegicus       231         Mus rattus       99         Mus alexandrinus       82         Mus musculus       52	

### Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities: San Francisco. Oakland Berkeley Los Angeles. Counties: Alameda (exclusive of Oakland and Berkeley). Contra Costa. Fresno. Merced. Monterey San Benito. San Joaquin. San Luis Obispo. Santa Clara. Santa Cruz. Stanislaus.	Aug. 11,1908 Sept. 24,1909 May 17,1914 None. None. None. June 4,1913 Sept. 18,1911	Oct. 23, 1908	None. None. None. None. Aug. 21, 1908 Aug. 7, 1914 Oct. 27, 1911 July 12, 1911 July 3, 1914 Aug. 26, 1911 June 29, 1910 June 2, 1911 June 2, 1911	398 rats. 126 rats. None. 1 squirrels, 1 wood rat. 1,563 squirrels. 1 squirrels. 5 squirrels. 5 squirrels. 18 squirrels. 18 squirrels. 25 squirrels. 35 squirrels. 13 squirrels.

<sup>1</sup> Wood rat.

#### Squirrels collected and examined for plague.

County.	Shot.	Exam- ined.	Found infected.
Alameda. Contra Costa. San Benito. Total.	33 342 107 482	33 342 107 482	None. None. None.

## Other animals collected and examined for plague.

San Benito Count '					
Ranches inspected and hunted over.	Ranches inspected and hunted over.				
Alameda County Contra Costa County Ean Benito County Total	••••••	49 21			
Operations on water front.					
Number of vessels inspected for rat guards  Number of reinspections made on vessels  Number of new rat guards procured  Number of defective rat guards repaired  Number of vessels on which cargo was inspected		19 16			
	Con- dition.	Rat evidence.			
Steamer Wilhelmina, from Hilo:  154 cases apples  100 sacks rice.  8 bales empty sacks  Steamers President, Admiral Farragut, Queen, and Admiral Dewey, from Seattle  50 rolls paper.  575 sacks flour, grain, oats, and wheat.  325 cases apples, tea, and canned milk.  27 crates household tools  50 packages paper.	O. K O. K O. K O. K O. K	None. None. None. None. None. None. None.			
Rats trapped on wharves and water front. 17 Rats trapped on vessels. 16 Traps set on wharves and water front. 190 Traps set on vessels. 138 Vessels trapped on. 15 Poisons placed on water front (pieces). 12,600  Amount of bread used in front (loaves). 190 Bait used on water front ar (pounds). Pounds of poison used on w	d vessels, ba	42 con 6			

Operations are being carried on under Federal supervision on the following-named properties, labor and material being furnished by owners:

Names.	Location.	Acres treated.
oisoned grain:		1
Moraga Co. Hooper Co. Peoples Water Co. Costa Dairy. L. Ramsdell Ranch. G. A. Cressey Ranch.	Contra Costa County	2,077.9
Hooper Co	do	2,019
Costo Doiry	do	2,600 325
L. Ramsdell Ranch	Merced County	160
G. A. Cressev Ranch.	do	720
estructors:	•	ATUER.
Southern Pacific Co	do	. 5
	ì	1

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, San Joaquin, Monterey, Merced, Stanislaus, San Benito, and Santa Cruz.

#### LOUISIANA-NEW ORLEANS.

The following report of plague-eradicative work in New Orleans for the week ended October 3, 1914, has been received from Asst. Surg. Gen. Rucker, of the United States Public Health Service, in charge of the work:

ATTERNATION OF A PARTY P		I DESCRIPTION AND MANAGED OF THE PARK	
OUTGOING QUARANTINE.		DESTINATON AND NUMBER OF RAILROAD	
Number of vessels fumigated with sulphur.	67	SPECTED WEEK ENDED OCTOBER 3—cont	muea.
Number of vessels fumigated with carbon		Minnesota	69
monoxide	14	Mississippi	
Pounds of sulphur burned	7, 176	Missouri.	69
Coke consumed in carbon monoxide fumi-		Nebraska	
gation (pounds)	106, 400	New York	. 9
Outgoing freight inspected (tons)	5, 205	Ohio	59
Total packages freight inspected	83,914	Oklahoma	5
Clean bills of health issued	28	Pennsylvania	12
Foul bills of health issued	5	Rhode Island	3
		Tennessee	
OVERLAND FREIGHT INSPECTION.		Texas	
Cars inspected and passed	1,609	Utah	2
Cars rat proofed.	1,951	Virginia	6
Cars condemned	18	West Virginia	2
Total cars inspected	3,578	Wisconsin	17
•	•		
DESTINATION AND NUMBER OF RAILROAD C.	ars in-	FIELD OPERATIONS.	
SPECTED WEEK ENDED OCTOBER 3.		Number of rats trapped	8,616
Alabama	115	Premises fumigated	47
Arizona	1	Premises disinfected	424
Arkansas.	29	Premises inspected	9,059
California	21	Poisons placed.	
Canada	11	Notices served	3, 259
Carolina, North	17	Buildings rat proofed during week ended	-,
Carolina, South	14	Oct. 3	126
Colorado	6	Buildings rat-proofed to date	1,426
Connecticut	6	Number of abatements week ended Oct. 3	1, 197
Cuba	1	Number of abatements to date	8,753
Delaware	1	Number of dead inspected	125
Florida	49	-	
Georgia	61	LABORATORY OPERATIONS.	
Tilinois	532	Rats examined	5,840
Indiana	32	Mus norvegicus	5, 191
Iowa	17	Mus alexandrinus	188
Kansas	11	Mus rattus	107
Kentucky	30	Mus musculus	2,876
Louisiana	1,303	Unclassified, putrid	187
Maryland.	5	Total rodents received at laboratory	8,549
Massachusetts	8	Number of suspicious rats	30
Michigan	14	Plague rats confirmed	15
	1		

#### Plague rats.

Case No.	Address.	Cap- tured.	Diagno- sis con- firmed.	Treatment of premises.
1163-170	1013 Magazine Street	Sept. 27	Sept. 27	Summary destruction of rat harborage; disinfection; rat proofing initiated.
171	832 Frenchmen Street	do	do	Summary destruction of rat harborage; rat proofing initiated; intensive trapping and poisoning.
172	1459 Bourbon Street	do	do	Summary destruction of rat harborage; disinfection; rat proofing initiated.
173	1233 St. Ann Street	Sept. 28	Sept. 30	Do.
174		Sept. 30	do	Fumigation; summary destruction of rat harborage; rat proofing initiated; intensive trapping and poisoning.
	Girod Street Wharf	do	do	Intensive trapping and poisoning.
176	162 South Rampart Street; found dead.	do	do	Totally demolished.
177		do	do	Disinfection; rat proofing initiated.

## Human plague cases.

Number	ous human cases examined r of human plague cases iles umber of human cases to date			1
Case No.	Name and place of infection.	Date sus picious.		Treatment of premises.
29	J. J. K	Sept. 30	Oct. 3	Fumigation; summary destruction of rat harborage; intensive trapping and poisoning.
Total ro	dents captured to October 3dents examined to October 3			
Mus Mus Mus	cases to October 3 by species: rattus		••••••	3 168
	red from Surg. Trotter		he Uni	tive work in Hawaii were ted States Public Health
	WEEK		SEPT. 19,	1914.
Rats Mon Rats Rats Examine Under et Showing Classific Mus Mus Mus	ts and mongoose takens trappedgoose trappeds found dead (Mus norvegicus)s killed by sulphur dioxides de microscopically xamination	443 364 11 1 67 360 0 0 17/ 106 66 15	Classification Mus ale Mus mu Mus rat Average nu Cost per rat Last case ra Apr. 12, 11 Last case hu Last case Hawaii, A Last case Hawaii, A	on of rats killed by sulphur dioxide:  50 20 20 20 20 20 20 20 20 20 20 20 20 20
		Hilo	<b>).</b>	
	WEEK 1	ENDED 8	SEPT. 12,	1914.
Number Number Number Croscoj Number Croscoj Number	of rats and mongoose taken	1,913 4 40 1,957	Classificatio Mus not Mus ale Mus rat Mus mu Mus mu Last case of Aug. 29, 1	f human plague, Paauhau Sugar

## 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.

#### CEREBROSPINAL MENINGITIS.

#### State Reports for September, 1914.

Places.	New cases re- ported.	Places.	New cases reported.
Kansas: Cherokee County Crawford County— Pittsburg Edwards County Ford County	1 1	Kansas—Continued. Gray County. Nemaha County. Total	1 1 6

#### City Reports for Week Ended Sept. 26, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Chicago, Ill. Cleveland, Ohio Jersey City, N. J. Los Angeles, Cal. New York, N. Y.	1	1 1 1 7	Philadelphia, Pa. Rockford, Ill. Schenectady, N. Y Wheeling, W. Va	1	1 1 1

#### DIPHTHERIA.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2781.

#### ERYSIPELAS.

#### City Reports for Week Ended Sept. 26, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Baltimore, Md. Chicago, Ill. Nashville, Tenn. New Bedford, Mass. New York, N. Y.	10	1	Philadelphia, Pa. Pittsburgh, Pa. Portland, Oreg. Rochester, N. Y. St. Louis, Mo.	1 2	1 1

#### MEASLES.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2781.

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#### PELLAGRA.

### City Reports for Week Ended Sept. 26, 1914.

During the week ended September 26, 1914, pellagra was notified by cities as follows: Charleston, S. C., 3 deaths; Lynchburg, Va., 1 case with 1 death; Nashville, Tenn., 1 case; New Orleans, La., 4 cases with 3 deaths; Richmond, Va., 1 death.

## PNEUMONIA.

## City Reports for Week Ended Sept. 26, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y Binghamton, N. Y Chicago, Ill. Cleveland, Ohio Dayton, Ohio. Grand Rapids, Mich Kansas Cfty, Kans Lexington, Ky Los Angeles, Cal.	50 9 2 1	2 2 37 7 7 2 1 1	Manchester, N. H. Marinette, Wis. Philadelphia, Pa Pittsburgh, Pa Reading, Pa Rochester, N. Y South Bethlohem, Pa South Omaha, Nebr Springfield, Ill	1 2 11 21 1 7 1 1	1 2 26 11 3

#### POLIOMYELITIS (INFANTILE PARALYSIS).

#### State Reports for September, 1914.

Places.	New cases re- ported.	Places.	New cases reported.
District of Columbia.  Kansas: Bourbon County— Fort Scott. Cowley County.	1 1 1	Kansas—Continued. Leavenworth County. Republic County Sumner County. Total	2 1 1

#### City Reports for Week Ended Sept. 26, 1914.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Ann Arbor, Mich	1 1 3 1 1		Haverhill, Mass Lynchburg, Va New York, N. Y Philsdelphia, Pa Rutland, Vt	1 1 4 1 2	i

#### RABIES.

#### Pennsylvania-Pittsburgh.

During the week ended September 26, 1914, a fatal case of rabies was notified at Pittsburgh, Pa.

#### Washington-Seattle-Rabies in Animals.

Surg. Lloyd, of the United States Public Health Service, reported that during the four weeks ended September 26, 1914, eight cases of rabies in dogs and one case in a cow were notified in Seattle, Wash. This makes a total of 405 cases of rabies in animals since the beginning of the outbreak in September, 1913.

#### SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2781.

#### SMALLPOX.

#### Miscellaneous State Reports.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
District of Columbia (Sept. 1-30)	1 1 1		Kansas (Sept. 1-30)—Cont'd. Counties—Cont'd. Finney. Scott. Total.	2 1 5	

#### City Reports for Week Ended Sept. 26, 1914.

Places.	Cases.	Deatis.	Places.	Cases.	Deaths.
Butte, Mont. Duluth, Minn Evansville, Ind. Kansas City, Mo.	2 1 1 1		Kokomo, Ind. Muncie, Ind. St. Joseph, Mo. Sumas, Wash.	1 1 3 1	

#### TETANUS.

#### City Reports for Week Ended Sept. 26, 1914.

During the week ended September 26, 1914, tetanus was notified by cities as follows: Chicago, Ill., 1 death; New York, N. Y., 1 death; Saratoga Springs, N. Y., 1 death.

#### TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 2781.

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## TYPHOID FEVER.

### State Reports for September, 1914.

Places.	New cases re- ported.	Places.	New cases re- ported.
District of Columbia	71	Kansas—Continued. Labette County—	
Kansas:		Parsons	ŀ
Allen County	9	Leavenworth County	
Anderson County	2	Leavenworth	
Atchison County—	1	Lincoln Co nty	
Atchison	. 3	Linn County	
Barber County	1	Lyon Co nty	
Barton County		Marion County	1
Bourbon County	5	Marshall County	
Fort Scott.		McPherson County	
Brown County	š	Meade Co.nty	}
Butler County.		Mitchell County	
Chase County		Montgomery County	,
Chautauqua County.		Coffeyville	,
Cherokee County		Nen aha County	ì
Clark County	2	Neosho County	
Clay County	2	Norton County	,
Cloud County	2 2 2 1	Osage County.	
Coffey County	ī	Ottawa County	Š
Comanche County	3	Pawnee County	ä
Cowley County	16	Reno Co .ntv	
Crawford County	15	H .tchinson	7
Pittsburg	ĭ	Rep blic County	ż
Doniphan County		Rice County	5
Douglas County	2	Riley County	2
Edwards County	2	Scott Co intv	ī
Elk County	2	Sedgwick County	î
Finney Co inty	2 2 3 7	Wichita.	18
Ford County	7	Seward Co nty	2
Franklin Co inty	7	Shawnee Co :nty-	_
Geary County	1 1	Topeka	1
Grav County	2 6	Summer County	10
Greenwood County	6	Thomas County	2
Harper Co nty	5	Washington Co inty	ī
Harvey County	5	Wilson Co :nty	10
Hodgeman County	3	Woodson Co nty	- i
Jackson Conty	15	Wyandotte County—	_
Jefferson Conty	3	Kansas City	g
Jewell Co 'nty	1	-	
Kingman Co inty	2	Total	304
Kiowa County	2 II		302

## City Reports for Week Ended Sept. 26, 1914.

#### TYPHOID FEVER-Continued.

#### City Reports for Week Ended Sept. 26, 1914—Continued.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Morristown, N. J.  Muncie, Ind. Nashville, Tenn Newark, N. J. New Bedford, Mass. New Castle, Pa. New Orleans, La. Newburyport, Mass. Newton, Mass. Newton, Mass. New York, N. Y. Niagara Falls, N. Y. Norfolk, Va. North Adams, Mass. Oakland, Cal. Orange, N. J. Passale, N. J. Philadelphia, Pa. Pittsburgh, Pa. Pittsburgh, Pa. Pittsburgh, Pa. Pittsburgh, Mass. Portland, Oreg. Portsmouth, Va.	4 8 2 1 10 1 1 1 3 1 1 1 1 3 1 1 1 3 3 1	13 13 1 1	Providence, R. I. Reading, Pa Roanoke, Va Rochester, N. Y Rockford, Ill Rockland, Me Sacramento, Cal Saginaw, Mich St. Louis, Mo Saratoga Springs, N. Y Schenectady, N. Y Schenectady, N. Y South Bend, Ind Springfield, Ill Springfield, Ohio Trenton, N. J Wheeling, W. Va Wilkes-Barre, Pa Wilkinsburg, Pa Wilkinsburg, Pa Wilkinsburg, Pa Wilmington, N. C Worcester, Mass Yonkers, N. Y	10 81 2 12 13 35 11 12 11 21 12 12	2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

#### DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

#### State Reports for September, 1914.

	Cases reported.			
States.	Diph- theria.	Measles.	Scarlet fever.	
District of Columbia	27 61	4 7	10 28	

#### Port Huron, Mich.—Diphtheria.

Acting Asst. Surg. Kesl, of the United States Public Health Service, reports that between September 24 and October 5, 1914, 10 cases of diphtheria were notified in Port Huron, Mich.

#### City Reports for Week Ended Sept, 26, 1914.

	Population as of July 1, 1914 (esti-	Total deaths		ph- ria.	Mea	sles.		rlet er.	Tube	ercu-
Cities.	mated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants: Baltimore, Md	579, 590 733, 802 2, 393, 325 639, 431 537, 650 5, 333, 537 1, 657, 810 564, 878 734, 667	190 223 569 142 1,323 451 150 200	20 47 125 58 39 251 37 35 49	1 3 17 3 4 14 8 8	77 14 11 3	1 1	3 34 27 6 8 78 13 56	1 5 2 1	26 39 178 21 33 410 76 27 44	19 23 44 11 12 162 53 13 22

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd. City Reports for Week Ended Sept. 26, 1914—Continued.

Cities.   United States   Census Bureau .   Causes   Census Bureau .   Causes Bure		Population as of July 1, 1914 (esti-	Total		ph- ria.	Mea	sles.		rlet ver.	Tub	ercu- sis.
ants:     Buffalo, N. Y.     Cincinnati, Ohio.     402, 175     94     18     3     8     20     Los Angeles, Cal.     438, 914     90     6     1     5     3     44     Milwaukee, is.     417, 054     89     27     4     3     15     3     44     Milwaukee, is.     417, 054     89     27     4     3     15     3     44     New Ark, N. J.     389, 160     99     21     3     15     34     New Orleans, La.     361, 221     103     49     4     2     1     20     From 200,000 to 300,000 inhabit-     ants:     Columbus, Ohio.     204, 567     54     22     1     11     14     23     Kaness City, Mo.     281, 911     64     7     7     22     2     2     Providence, R. I.     245, 960     7     77     17     1     3     Providence, R. I.     241,518     52     2     1     10     3     Providence, R. I.     3     Prom 100,000 to 200,000 inhabit-     ants:     Albany, N. Y.     241,518     52     2     1     1     8     From 100,000 to 200,000 inhabit-     ants:     Albany, N. Y.     102,961     32     2     3     6     7     Camden, N. J.     102,465     7     20     7     11     1     8     Prall River, Mass.     110,357     21     2     2     3     6     7     Camden, N. J.     102,465     7     7     4     Hartford, Conn.     107,038     36     12     12     7     4     Hartford, Conn.     107,038     36     12     12     7     4     Hartford, Conn.     114,899     37     1     1     8     New Bedford, Mass.     111,004     30     1     1     8     New Bedford, Mass.     111,489     37     1     1     8     Redford, Mass.     111,490     3     1     1     8     Redrange, Pan.     106,831     44     8     12     3     4     0     3     1     1     8     8     10     1     1     1     1     1     1     8     1	Cities.	mated by United States Census	all	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Columbus, Ohio.   204, 567   54   22   7   7   1   22   23   283, 931   75   20   1   1   14   23   23   24   25   25   25   25   25   25   25	ants: Buffalo, N. Y. Cincinnati, Ohio Loe Angeles, Cal Milwaukee, vis. Newark, N. J. New Orleans, La. From 200,000 to 300,000 inhabit-	402, 175 438, 914	94 90 89 99	18 6 27 21	1 4	<u>5</u>		8 3 7 15	· 1	20 44 11 34	19 9 16 11 14 13
Albany, N. Y. 102,961 32 2 3 6 10 Cambridge, Mass. 110,357 21 2 3 3 6 7 Camden, N. J. 102,465 2 3 4 5 5 Dayton, Ohio. 123,794 21 5 1 3 9 9 9 Fall River, Mass. 125,443 47 3 4 3 Grand Rapids, Mich. 123,227 21 12 2 7 4 4 Hartford, Conn. 107,038 36 12 7 4 4 Hartford, Conn. 107,038 36 12 2 4 Nashville, Tenn. 114,899 37 1 1 1 2 4 4 Nashville, Tenn. 114,899 37 1 1 1 2 4 4 Oakland, Cal. 183,002 34 5 1 1 4 4 Oakland, Cal. 183,002 34 5 1 1 4 4 8 Reading, Pa 103,361 35 3 1 5 6 6 Richmond, Va 134,917 42 11 4 4 8 Toledo, Ohio. 184,126 46 12 2 5 5 1 1 4 8 N Vorcester, Mass. 157,732 38 3 2 5 5 1 1 1 4 4 8 N Vorcester, Mass. 157,732 38 3 2 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Columbus, Ohio. Jersey City, N. J. Kansas City, Mo. Portland, Oreg. Providence, R. I. Rochester, N. Y. From 100,000 to 200,000 inhabit-	293, 921 281, 911 260, 601 245, 090	75 64 54 77	20 7 6 17		<u>2</u>		14 2 1 12		3	6 4 10 2 15 4
Altoona, Pa. 56,553 10 3 1 1 1 Atlantic City, N. J 53,952 6 2 2 2 8 8 youne, N. J 65,271 15 1 1 1 1 8 Berkeley, Cal 52,105 5 13 1 1 1 2 8 Brockton, Mass 64,043 13 1 1 1 2 2 Charleston, S. C 60,121 27 4 1 1 2 2 Charleston, S. C 60,121 27 4 1 1 2 2 Charleston, S. C 60,121 27 4 1 1 6 8 Erie, Pa. 72,401 18 5 1 1 6 8 Erie, Pa. 72,401 18 5 1 1 1 2 2 8 Brockton, Mass 64,043 13 1 1 6 8 Erie, Pa. 72,401 18 5 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Albany, N. Y. Cambridge, Mass. Camden, N. J. Dayton, Ohio. Fall River, Mass. Grand Rapids, Mich. Hartford, Conn. Lowell, Mass. Nashville, 'enn. New Bedford, Mass. Oakland, Cal. Reading, Pa. Richmond, Va. Toledo, Ohio. Trenton, N. J. Worcester, Mass. From 50,000 to 100,000 inhabit-	110, 357 102, 465 123, 794 125, 443 123, 227 107, 038 111, 004 114, 899 111, 230 183, 002 103, 361 134, 917 184, 126	21 47 21 36 30 37 36 34 35 42 46 44	12 12 1 1 1 3 3 11 12 8	2	3 1 5 1	3	9 4 7 2 1 4 1 5 4	6	7 5 9 3 4 8 4 8 6 8	25231214321664322
Manchester, N. H.       75, 635       16       2       2       1         Mobile, Ala.       55, 573       13       1           Norfolk, Va.       86, 540       2       1       1       1       3         Passaic, N. J.       66, 270       15       2       1       1       3         Pawtucket, R. I.       56, 901       24       1       1       1         Rockford, Ill.       52, 337       14       2        2         Saginaw, Mich       53, 988       12       2        1         St. Joseph, Mo       82, 712       26        1       1         Schenectady, N. Y.       90, 503       20       4       2       4       1         Springfield, Ill.       57, 972       21       1       6       3         Springfield, Ohio.       50, 058       17       1       1       3	Altoona, Pa. Atlantic City, N. J. Bayomme, N. J. Berkeley, Cal. Binghamton, N. Y. Brockton, Mass. Charleston, S. C. Duluth, Minn. Erie, Pa. Evansville, Ind. Harrisburg, Pa. Hoboken, N. J. Johnstown, Pa. Kansas City, Kans. Little Rock, Ark. Lynn, Mass. Little Rock, Ark. Lynn, Mass. Manchester, N. H. Mobile, Ala. Norfolk, Va. Passaic. N. J. Pawtucket. R. I. Rockford, Ill. Saginaw, Mich. St. Joseph, Mo. Schenectady, N. Y. South Bend, Ind. Springfield, Ill.	53,952 65,271 52,191 64,043 66,121 89,331 71,2401 71,244 69,493 74,904 64,642 94,271 53,811 98,207 75,635 55,573 86,540 66,270 56,901 52,337 53,988 65,114 86,511 86,511 86,511	18 24 15 30 29 20 16 13 12 22 26 20 10 21	6 4 35 55 37 79 3 4 22 1 22 1 2	1 1 1 1	1 1 1 2 2 1		1 1 1 1 3 3 2 2 1 1	i	2 2 2 1 1 1 2 12 3 3 3 3	1 2 1 3 1 3 2 2 3 3 1 3 1 3 3 1

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd. City Reports for Week Ended Sept. 26, 1914—Continued.

,	Population as of July 1, 1914 (esti-		tì	iph- ieria.	Me	asles.		arlet ver.		bercu- osis.
Cities.	mated by United States Census Bureau).	from all causes	1	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 25,000 to 50,000 inhabitants:										
Alamada Cal	26, 330 36, 509	111		-			·			<b>.</b>
Auburn, N. Y. Aurora, Ill. Austin, Tex. Brookline, Mass.	33, 022 33, 218	6	i							
Auslin, Tex	33, 218 31, 138	11	10	·	•					2
Butte, Mont	41,781	16		.	1		1		19	2
Chelsea. Mass	32, 452	24	1 1		. 1				3	
Chicopee, Mass	28, 057 30, 847	6 10			:				1	<b>-</b>
East Crange, N. J. Elmira, N. Y	39,852		. 1	1			l		l	
Elmira, N. Y	37, 816	9			.					
Everett, Mass	37, 381 40, 507	8 6				1				1
Fitchburg, Mass Galveston, Tex Haverhill, Mass	40 280	12	1		.		1			
Haverhill, Mass	47,071 45,842 37,924 31,367	12					2		2	
Kalamazoo, Mich Knoxville, Tenn La Crosse, ' is Lancaster, Pa	45,842 37 994	12	2							·····
La Crosse, is	31,367		i						1	
Lancaster, Pa	49,680		. 3						<u>-</u> -	
Lexington, KyLynchburg, Va	38,819 31,830	18 7	4 2	1		• • • • • •	1		1	
Medford, Mass	25, 240	10					i			
Moline, Ill	26,402	7								
Newcastle, Pa	39,569 31,517	6	2 6			• • • • • • •	1 3		·····2	2
Newcastle, Pa Newport, Ky Newport, R. I	29, 154	4			J					
Newton, Mass Niagara Falls, N. Y	42, 455	8	2							· · · · · ·
Niagara Falls, N. Y	35, 127 30, 265	13 7	2				1			· · · · · •
Orange, N. J.	31,908	13	ĩ				5		3	<b>-</b>
Orange, N. J. Pasadena, Cal. Pittsfield, Mass.	40,880	7					2			
Portsmouth, Va	36,531 37,569	10 12	3				$\frac{1}{2}$		2	1
Racine, Wis	44,528	11	i	İ	1 !		. 2			
Roanoke Va	40,574	19	14	1			6	1		1
Sacramento, Cal	62,717 48,900	15	i		17		• • • • • • •		5 3	3
South Omaha, Nebr	26,368	6	l							
Superior, Wis Taunton, Mass	44,344	9								
Waltham Mass	35, 631 29, 688	16 7	4						1	2
Wheeling, W. Va	42,817	10	6						î	
Waltham, Mass	42,817 27,781	3	4		!.					• • • • •
York, PaZanesville, Ohio	49, 430 29, 949	· · · · · · · ·	····i						6	• • • • •
Less than 25,000 inhabitants:	20,010		•							· · · · · •
Ann Arbor, Mich	14,948	3							5	· · · · •
Beaver Falls, Pa Braddock, Pa	13, 100   . 20, 935		1				····a· ·			• • • • •
Cairo, III	15,392	6	1				-	.		
Cambridge, Ohio	12,640	2						-		• • • • •
Clinton, Mass	13,075 15,982	3								• • • • • •
Coffeyville, Kans. Concord, N. H. Cumberland, Md. Dunkirk, N. Y. Florence, S. C.	22,291 23,846	12					.			4
Cumberland, Md	23,846	9			-		1 .		3	· • • • •
Florence S C	19,607	5 2								•••••
Galesburg, III	23,570	8								
Crond Howen Wish	•••••	1			-					1
Harrison, N. J. Kearny, N. J. Key West, Fla.	16, 160 21, 967	1 5 6 1 3 2 3	····i							
Key West, Fla	21,150	6	1							2
Kokomo, Ind	19,694	1	1		-					••••
Massillon, Ohio	14,610 14,912	3 9	i		···i			:::::		
Melrose, Mass	16,887	3	3				1 .			••••
Montelair, N. J	24,782	7	2		-				1 .	••••
Marinette, Wis.  Massillon, Ohio.  Melrose, Mass. Montclair, N. J.  Morristown, N. J.  Muncie, Ind.  Muncie, Ind.	24 960	6	1		···i :		"i :			····i
Muscatine, Iowa	16, 887 24, 782 13, 033 24, 969 17, 074	6 2			:ا.ت		!:			•••••

# DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd. City Reports for Week Ended Sept. 26, 1914—Continued.

	Population as of July 1, 1914 (esti-	Total deaths		ph- ria.	Mea	sles.		rlet er.		ercu- sis.
Cities.	mated by United States Census Bureau).	from all causes.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Less than 25,000 inhabitants— Continued. Nanticoke, Pa. Newburyport, Mass. New London, Conn. North Adams, Mass. Northampton, Mass. Palmer, Mass. Plainfield, N. J. Portsmouth, N. H. Pottstown, Pa. Rockland, Me. Rutland, Vt. Saratoga Springs, N. Y. Steelton, Pa. Vineyard Haven, Mass. Wilkinsburg, Pa.	15,147 20,557 22,019 19,766 8,955	5 3 3 12 4 7 7 4 4 7 6 6 8 2 5 5	1 1 2 1		2		1 1		1 3 1	1 1

#### IN INSULAR POSSESSIONS.

#### PHILIPPINE ISLANDS.

#### Cholera-Plague-Infected Rats-Manila.

Cholera has been notified in Manila as follows: Week ended August 15, 1914, 23 cases with 9 deaths; week ended August 22, 1914, 18 cases with 14 deaths. In reporting for the week ended August 22, 1914, Asst. Surg. Duffy, of the United States Public Health Service, acting chief quarantine officer for the Philippine Islands, says: "Cholera figures for the week show but a slight decrease over the figures for the preceding week. The actual situation has, however, greatly improved. Eleven of the cases reported for this week occurred during previous weeks, but the positive reports on these were not available until the present week. During this week but 7 cases and 9 deaths occurred, and there has been no case now since August 19."

Plague-infected rats continue to be found in Manila at the rate of 1 per week. On August 24, 1914, their distribution was reported as the most extended which has been recorded.

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## FOREIGN REPORTS.

#### AUSTRIA-HUNGARY.

#### Cholera.

It is reported that cholera is increasing in Hungary to such an extent as to cause the authorities some apprehension. Twenty-seven cases were announced October 1, 111 cases October 2, and 240 cases October 3, mostly confined to military hospitals, but a small proportion of cases occurred among civilians. Straggling cases are reported from many parts of the country to which wounded have been brought. Several cases have been notified in Vienna.

#### BRAZIL.

#### Plague-Rio de Janeiro.

A fatal case of plague was notified at Rio de Janeiro October 3, 1914.

#### CHINA.

#### Plague-Plague-Infected Rats-Hongkong.

During the two weeks ended August 29, 1914, 13 cases of plague with 13 deaths were notified in Hongkong. During the same period 3, 306 rats were examined for plague infection. Three plague-infected rats were found.

#### Plague-Infected Rats-Shanghai.

During the two weeks ended September 5, 1914, 451 rats were examined in Shanghai. Two plague-infected rats were found.

#### GUATEMALA.

#### Quarantine Against New Orleans Discontinued-Puerto Barrios.

Quarantine measures at Puerto Barrios against New Orleans, La., were discontinued September 23, 1914.

#### ITALY.

#### Quarantine Against Smyrna.

Arrivals at Italian ports from Smyrna, Asiatic Turkey, were made subject September 9, 1914, to the regulations against the importation of plague.

#### JAPAN.

#### Status of Typhus Fever and Plague—Yokohama and Tokyo.

The outbreaks of typhus fever and plague which occurred at Yokohama and Tokyo and vicinity came to an end during the latter part of August.

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#### PERU.

#### Plague-Callao.

Plague was reported present at Callao, October 8, 1914.

#### PORTUGAL.

#### Plague-Lisbon.

Two new cases of plague were notified at Lisbon, October 9, 1914.

#### RUSSIA.

#### Cholera-Warsaw.

An outbreak of cholera was notified at Warsaw, August 30, 1914.

#### CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

#### Reports Received During Week Ended Oct. 16, 1914.

[From medical officers of the Public Health Service, American consuls, and other sources.]

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria Hungary: Hungary	Oct. 1-3	378		
Vienna	Oct. 8			Present.
Celebes— Macassar	Aug. 9-15	11	11	
Sumatra— Palembang	do	15	9	
India: Bassein	Jan. 23-29	2	1 5	
Cocanada Kashmir, province	Aug. 16–22 Aug. 1–14	• • • • • • • • • • • • • • • • • • • •	13	Endemic. Aug. 18, increasing.
Madras	Aug. 23-29 June 21-27	58 15	44 15	2340mio. 114g. 10, mc reasing.
Indo-China: Saigon	Aug. 18-24	2	2	
Philippine Islands: Manila	Aug. 9-15	_	9	
Do	Aug. 16-22		14	Including 11 cases with 5 deaths not previously reported.
Warsaw		•••••		Aug. 30, present.

<sup>&</sup>lt;sup>1</sup> From the Verölfentlichungen des Kaiserlichen Gesundheitsamtes, Sept. 9, 1914.

#### PLAGUE.

	· · · · · · · · · · · · · · · · · · ·			
Brazil:				
Rio de Janeiro				Oct. 3, 1 fatal case.
British East Airica:				000.0, 2.10.02.000.
	July 1-31		1	
Cevion:				
Colombo	Aug. 16–22	7	9	
China:			i i	-
	Aug. 16–29	13	13	
Dutch East Indies:	_			
Provinces—	_			
	fuly 1-31	336	319	•
	do	161	129	
Pasoeroean		730	629	
	do	66	57	
Egypt:				
	Sept 11-22	5	5	
Port Said	Aug. 23-Sept. 9	2		
India:		_	_	
Bassein	une 22-Aug. 8	3	3	,
	Aug. 16–22		3	
	une 21-27	15	14	
Rangoon J	uly 1-31	197	122	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

## Reports Received During Week Ended Oct. 16, 1914—Continued.

#### PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China: Saigon Peru: Callao	Aug. 18-24	1	5	Present.
Portugal: Lisbon Turkey in Asia:	Oct. 9			Tresent.
HaifaSmvrna.	Sept. 7-9	1 3	1	
Turkey in Europe: Saloniki	Aug. 6–12	1	2	Total: Cases 7, including 3 among soldiers and 4 among immi grants.
	SMAI	LPOX.		· · · · · · · · · · · · · · · · · · ·
Australia: New South Wales— Sydney				Aug. 21-Sept. 3: Cases, 13 in the
Brazil: Rio de Janeiro		256	46	metropolitan area and 10 cases in the country districts.
Canada: HamiltonQuebec	Sept. 1–30 Sept. 27–Oct. 3	3 1		
Canary Islands: Teneriffe— Santa Cruz	Aug. 16–Sept. 19	6		
Ceylon: ColomboFrance:	Aug. 16-22		1	
Parisindia: Rangoon	Aug. 16-29 July 1-31		1	
Mexico: Mazatlan Peru:	Sept. 2–22		6	
Callao	Oct. 8			Present.
Furkey in Europe: Constantinople	" -		1	

#### Reports Received from June 27 to Oct. 9, 1914.

#### CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary: Hungary				Sept. 26, present in 5 localities.
BudapestVienna	Sept. 26 Sept. 13	1		, 2
Ceylon: Colombo Uda Pusselawa, district China:	June 14–20 June 7–13	1	1	Present in Kumbalagamuwa and the neighboring tea estates.
Amoy— Kulangsu Hankow Chaochow fu				From up-country districts. Present.
Canton		1	1	June 6-13: In Bali and Lombok:
Celebes. Macassar. Java—	July 19–Aug. 1 Aug. 2–18	85 47	85 <b>4</b> 0	Cases, 44; deaths, 23.
Batavia	Aug. 28-July 18	2	2	Epidemic.

# CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued. Reports Received from June 27 to Oct. 9, 1914—Continued.

#### CHOLERA-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Dutch East Indies—Continued.				
Moluccas-	_	l	l .	
Menado	June 21–27	42	14	· ·
Sumatra— Palembang	Aug. 2-18	29	11	
ndia:		1	i	
Bassein	Apr. 26-June 20	82	64	
Bombay	May 17-Aug. 22	249	156 258	
CalcuttaCoconada	May 10-Aug. 15 July 18-24		5	·
Madras	May 31-Aug. 22	243	176	
Moulmine	June 7-13	30	1 1	
NegapatamRangoon	May 14-July 25 Apr. 1-June 30		30	
Indo-China	ripi. i-vune oo	l		Jan. 1-June 10: Cases, 146; deaths
	- 44.00	Ι.	l ·	77. May 21-June 20: Cases, 22
Battambang	June 11-20	4 4		<b>.</b> .
CholonSaigon	July 1–10   June 2–Aug. 17		14	• '
Japan:		"		
Nagasaki	Oct. 2			Present in vicinity.
Persia:	June 15	1		
AnzaliPhilippine Islands:	Julie 15	1 1		
Manila	July 4-Aug. 8	65	55	
Provinces	do			Present in 6 Provinces.
Russia: Podolia	_	ĺ		July 19-Aug. 2: Cases, 254
rodona		i		deaths, 85.
Bratzlaw	July 26-Aug. 2	1		250.00, 00.
Jampol	July 19-Aug. 2	25	8	
LetichevLitine	July 10 July 26-Aug. 8	2 8	2 3	
Vinnitza	July 19-Aug. 2	220	74	
Siam:				
Bangkok	Apr. 19-July 11		277	
Straits Settlements: Singapore	May 10-Aug. 8	121	104	
Turkey in Europe:	may 10 mag. o	101	101	
Adrianople	May 14-19		2	
Constantinople	July 15	1		
Viza Turkey in Asia:	July 22	1	• • • • • • • • • • • • • • • • • • • •	
Eski-Cheri	July 23-24	2	1	·
Tagadima	July 29	2	•••••	
	YELLOW	FEVE	R.	
Brazil:			···	
Bahia	May 10-Aug. 29	FEVEI	16	
BahiaPernambuco			···	
BahiaPernambucoEcuador:	May 10-Aug. 29 May 1-15	19	16 1	
BahiaPernambuco	May 10-Aug. 29 May 1-15		16	
Bahia. Pernambuco. Ecuador: Guayaquil. Do. Mexico:	May 10-Aug. 29 May 1-15 May 1-31 Aug. 1-31	19 3 4	16 1	
Bahia. Pernambuco. Ecuador: Guayaquil. Do. Mexico: Merida.	May 10-Aug. 29 May 1-15	19	16 1	
Bahia. Pernambuco. Ecuador: Guayaquil. Do. Mexico: Merida. Venezuela:	May 10-Aug. 29 May 1-15 May 1-31 Aug. 1-31 Sept. 14	19 3 4 1	16 1 1 2	
Bahia. Pernambuco Ecuador: Guayaquil Do. Mexico: Merida. Venezuela: Caracas La Guayra	May 10-Aug. 29 May 1-15 May 1-31 Aug. 1-31 Sept. 14 June 1-30 Aug. 16-31	19 3 4	16 1	·
Bahia Pernambuco Cavador: Guayaquil Do. Mexico: Merida Venezuela: Caracas Caracas	May 10-Aug. 29 May 1-15 May 1-31	19 3 4 1	16 1 1 2	Present in light form. No case since.
Bahia. Pernambuco Ecuador: Guayaquil Do. Mexico: Merida. Venezuela: Caracas La Guayra	May 10-Aug. 29 May 1-15  May 1-31 Aug. 1-31  Sept. 14  June 1-30 Aug. 16-31  June 15	19 3 4 1	16 1 1 2	Present in light form. No cases since.
Bahia. Pernambuco Ecuador: Guayaquil Do. Mexico: Merida. Venezuela: Caracas La Guayra Maracaibo.	May 10-Aug. 29 May 1-15  May 1-31 Aug. 1-31  Sept. 14  June 1-30 Aug. 16-31  June 15	19 3 4 1 1	16 1 1 2	Present in light form. No case since.
Bahia. Pernambuco. Ecuador: Guayaquil Do. Mexico: Merida Venezuela: Caracas La Guayra Maracaibo.	May 10-Aug. 29 May 1-15	19 3 4 1 1 1 1	16 1 2 2	Present in light form. No case since.
Bahia. Pernambuco. Ecuador: Guayaquil. Do. Mexico: Merida. Venezuela: Caracas La Guayra Maracaibo.  Brazil: Bahia	May 10-Aug. 29 May 1-15 May 1-31 Aug. 1-31 Sept. 14 June 1-30 Aug. 16-31 PLAC	19 3 4 1 1 1 1	16 1 1 2 1 1	Present in light form. No cases since.
Bahia	May 10-Aug. 29 May 1-15  May 1-31 Aug. 1-31 Sept. 14  June 1-30 Aug. 16-31 June 15  PLAC  May 17-Aug. 22 May 1-Aug. 15	19 3 4 1 1 1 1	16 1 1 2 1 1 1	Present in light form. No cases since.
Bahia. Pernambuco Ecuador: Guayaquil Do. Mexico: Merida. Venezuela: Caracas. La Guayra Maracaibo.  Brazil: Bahia. Pernambuco	May 10-Aug. 29 May 1-15 May 1-31 Aug. 1-31 Sept. 14 June 1-30 Aug. 16-31 PLAC	19 3 4 1 1 1 1	16 1 1 2 1 1	Present in light form. No cases since.

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

## Reports Received from June 27 to Oct. 9, 1914—Continued.

#### PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China				Jan. 1-Apr. 30, present in Hoks- chan, Shuntak, Tangsching, and Tungkun. Apr. 3-17, present in Kan-lai and San-hu, 20 miles distant from Pakhoi. June 6, still present in vicinity
Amoy		l		of Swatow. June 20, improving in the Chaochow and Puning districts.  Present: July 13, present in inland villages. Aug. 10, diminishing.
Kulangsu Canton Chinchew	May 20	1,156		Present 30 miles north from
Fatshan Hongkong	1	1	746	Amoy.
Pakhoi	June 18	2		Total, Jan. 4-July 25: Cases, 2,127; deaths, 1,679. From a vessel from Hongkong. Apr. 3-June 18: Cases, 100. In Kan-lai and San-hu, 20 miles
Cuba				Total, Mar. 5-Aug. 14: Cases, 43:
El Aceite (near El Caney)	July 27-Aug. 2	4		deaths, 9.  Including 2 cases previously reported from vicinity of El Caney; all removed to and previously reported as from Santi-
Santingo	· · · · · · · · · · · · · · · · · · ·			ago. June 30-Sept. 23: Cases, 12 (case Sept. 17 from El Caney); deaths, 4. One of these deaths was a case from El Aceite.
Dutch East Indies: Provinces				Total, Apr. 1-June 30: Cases, 3,787; deaths, 3,385.
Kediri	dodo	718 252 2,628 189	692 220 2,301 172	o, ioi, deduze, opeo.
Ecuador: GuayaquilEgypt		15	5	Total, Jan. 1-Aug. 16: Cases, 184;
Alexandria	June 2-Aug. 22 July 17	29	15	deaths, 95.
Provinces—	June 9-Aug. 22	1 21	9	
Assiout Charkieh Fayoum	May 25-June 20 July 13 May 27-Aug. 13	5 1 8	1 1 2	
Gar: ieh	July 24 May 27–June 24 June 17	. 1 6 1	3	
Menouf	May 23-July 12	10	5	
Dar-es-Salaam Muanza Great Britain:	May 2-June 10 Feb. 21-Mar. 18	777	5	
LiverpoolGreece: Piræus	Aug. 8-12	9	3 2	Sept. 30, ended.
Hawaii: Paauhau	Aug. 17	1	1	sept. 69, chaca.
India	••••••	31	31	Total, Apr. 27-Aug. 1: Cases, 47,605; deaths, 41,811.
BasseinBombayCalcuttaKarachi	Apr. 26-July 25 May 17-Aug. 22 May 10-Aug. 8 May 24-July 18 Apr. 26-July 25	562	472 157 27	
MaulmineRangoon	Apr. 26-July 25 Apr. 1-June 30	83 557	82 524	
Indo-China	P			Total, Jan. 1-June 10: Cases, 1,414; deaths, 1,146. June 11-July 20: Cases, 132.
CholonPhanitet	Jan. 1-July 20 Jan. 1-July 10	81 389		• • • • • • • • • • • • • • • • • • • •

# CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued. Reports Received from June 27 to Oct. 9, 1914—Continued.

#### PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Indo-China—Continued.				
Phanrang	Jan. 1-July 10	. 852		
Pnum Penh	do			
Saigon	.  May 19-Aug. 17	145	54	
Soctrang	May 1-July 10	. 22	]	•
Italy:			İ	I
_ Catania			-	Reported present.
Japan			-	Total, Jan. 1-July 31: Cases, 78; deaths, 64.
Tradamana	June 9-July 3	. 3	i	Near Yokohama.
Hodogaya O-No district	June 9-15	:l i		. I Car I Okonsina.
Taiwan (Formosa)—	June 5-10:	1 1		
Kagi	May 3-Aug. 8	303	273	
Taihoku	Aug. 16-22 June 22-Aug. 8		. 2	
Tokyo	June 22-Aug. 8	. 1		Total, Apr. 18-July 25: Cases, 45.
Yokohama	July 5-Aug. 15		4	Total, Apr. 18-July 25: Cases, 45. And vicinity. Total, May 23- Aug. 15: Cases, 23; deaths, 19.
		1 _	i	Aug. 15: Cases, 23; deaths, 19,
Mauritius	Apr. 17-23	. 2		
Peru:		i	ı	No semante et l'all
Ancachs			-	No reports of deaths received. Total, Feb. 9-Mar. 22: Cases, 4, including 2 cases, p. 1319, pt. 1.
			-	including 0 const. 22: Cases, 4,
ChimboteQuarhuay (Huaylas)	Mar 22_May 2	l	ı	Present.
Onerhoev (Huevles)	do	1	-	Do.
Samanca	do			Do.
Arequipa—		1		1 20.
Mollendo	Mar. 23-July 5	14		
Cahamarca—				
Contumaza	Mar. 23-May 2	3		1
Lambayeque—	_	ł	I	
Chiclayo	do	3		
Guadalupe	do	1		
Libertad—	Man 90 Man 90	i	l	D4
Duacamarca (Otzuco)	Mar. 23-May 30 Mar. 24-30 Mar. 23-May 2	4		Present.
Pichipampa (Otzuco) Salavarry	Mar 22_May 2	1		
San Pedro	do	8		From Pacasmayo.
Trujillo	Mar. 23-June 7	16		From racasmayo.
Lima—				
Unigambal (Santiago	do	16		
de Chuco).				÷ *
Lima	Mar.23-July 5	17		
Surco (Matucana)	do	11		
Piura—	a			*
CatacaosLa Huaca	June 8–July 5 Mar. 23–July 5	4		
Piura	Mor 93_Tuly 5	12		
Philippine Islands:	Mai. 20-July J	12		
Manila	May 17-Aug. 8	6	6	May 17 1 case from a a Maine
	may it itug. o	U	· ·	May 17, 1 case from s. s. Taisang from Amoy; May 23, 1 case from
	İ			
				12-20, a fatal case from s. s. Linan from Amoy; June 17, a fatal case in the Philippine General Hospital.
	- 1			Linan from Amov: June 17, a
				fatal case in the Philippine
a.	1			General Hospital.
Cebu		• • • • • • •		may 20, I case ou s. s. Rudi indin
Postureal.				Hongkong.
Portugal: Lisbon	Oct. 8			December 6
Russia:	Oct. 8	6		Pneumonic form.
Astrakhan government	1			Total May 05 July 15, Come to
Albumanum Bovernment				Total, May 25-July 15: Cases, 49; deaths, 46.
Kirghis steppe—	1			deaths, to.
Kirghis steppe— Betas-Tschagal	May 25-July 15	2		
Bulanai	May 25-July 15 May 25-June 14	10	10	7 of these cases pneumonic.
Manysch-Tschagal.	do	-š		F
Kalmuck steppe—	1	1	ı	
Archanskoge-Tebe .	do	4		
Gubja	do	4		
Schitkur	do	1		
Dakar	May 15	12	1	Marr 17 92 5 denths deller
~ James	may 10	12		May 17-23, 5 deaths daily among natives.
iam:	[	ŀ	i	natives.
Bangkok	Apr. 19-July 11		10	
traits Settlements:	1			
	May 10-16	2	2	

## CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX-Continued.

## Reports Received from June 27 to Oct. 9, 1914—Continued.

#### PLAGUE-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Tripoli				July 15, present in Azizia, Tar huna, and Zanzur, vicinity o
Turkey in Asia: Basra	June 24-July 19	16	8	Tunis.
BeirutChiosJana	June 16-Aug. 23 Aug. 2 June 5-27	5	3	Epidemic.
KutSamos	July 6		1	From a steamboat from Bagdad to Basra. Epidemic.
Smyrna	July 2-Aug. 29 Sept. 15	5 3	3	
Union of South Africa: Cape Fown	Sept. 24			"Few cases plague outlying districts reported localized."
Zanzibar	July 1-Aug. 21	8	5	
	SMAI	LPOX.		
Algeria: Departments—		_		
Algiers Constantine	Mar. 31-May 31	7 7		
Oran Arabia:	do	57		
AdenArgentina: Buenos Aires	June 10-16 June 1-30		1	
Australia: New South Wales— Sydney				Total May 8-Aug. 20: Cases, 213 in the metropolitan area and 70
Western Australia—				cases in the country districts.
Bunbury quarantine station. Austria-Hungary:	May 5-June 12	8	1	From s. s Kilchattan, from Bom- bay, including previous report.
GaliciaLower Austria	May 17-July 25 May 31-June 20	12 2		
Styria	July 5-11	2		
Upper Austria Belgium: Liege	May 17-July 11 June 1-6	4	3	
Brazil: Bahia	June 1-Aug. 8	14		
Para Pernambuco Rio de Janeiro	May 24-30 May 1-Aug. 15 May 10-Aug. 22	1,777	1 41 286	
Canada: British Columbia— Vancouver	Aug. 18-Sept. 5	4		
Manitoba— Winnipeg Ontario—	June 14-July 25	8		
Hamilton Niagara Falls Ottawa	Aug. 1-31	3 1 1		
Prince Edward Island— Charlottetown	July 16-22	1		
Quebec— Quebec Canary Islands: Teneriffe—	July 11-Sept. 12	3		
Santa Cruz	June 28-Aug. 29		14	
ColomboUva district—	May 19-Aug. 15	7	1	Among cooling from India
Passara	June 7-13	39	11	Among coolies from India.  May 16-23, present in Kaying and increasing in Choa Chow.
AmoyCanton	May 17-June 13 Jan. 1-Apr. 30	21		Present.

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

## Reports Received from June 27 to Oct. 9, 1914—Continued.

#### SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Chungking	May 23	<u> </u>	.	Endemic.
Dairen	June 7-July 4	2	1	
Hongkong	May 10-July 18	15	12	Total Jan. 4-May 30: Cases, 93
		l	1	deaths, 65.
Nanking	May 23			Always prevalent.
Newchwang Pakhoi	June 13			Do.
Pakhoi	Apr. 17			Present, and in San-hu, 20 miles
a	35. 10.1			distant.
Shanghai	May 18-Aug. 9	10	16	Deaths among natives.
Tientsin	June 6	1 21		
Tsingtau	May 19-July 5	21	3	!
Dutch East Indies: Borneo	May 17-July 25	440	91	In the western part.
Java	may 11-5uly 25	710	31	In the western part. May 2.
JAVA			1	In the western part. May 3- Aug.8: Cases, 1,697; deaths, 379,
		l	ł	including Batavia.
Batavia	May 3-Aug. 8	129	40	monada Duna (ma
Tegal	Aug. 2-8	19	6	i
Egypt:	1146. 2 01111111	-	1	
Alexandria	June 4-Sept. 2	22	13	
Cairo	May 21-Aug. 26	193	74	
Port Said	May 21-June 6	4		
France:	•	1		
Bordeaux	June 7-July 11 May 1-31		4	
Marseille	May 1-31		2	
Paris	May 24-Aug. 15	25	1	
Germany				May 31-Aug. 22: Cases, 10.
Hamburg	June 7-27	5		
Kehl	May 1-31		1	
Gibraltar	June 8-27	1	1	
Great Britain:	Toma & Tooler 10	4		
Leeds	June 6-July 18	1		
SouthamptonGreece:	June 29-July 4			
Athens	July 6-12		1	
Patras	Sept. 2-8	3	î	
ndia:	Dopu. 2 o	•	-	
Bombay	May 19-Aug. 22	81	49	
Calcutta	May 10-Aug. 15		230	
Karachi	May 24-July 25	13	4	
Madras	May 17-Aug. 22	24	1	
Rangoon	Apr. 1-June 30	9	1	
ndo-China:	35 10 10			
Saigon	May 12-18	2		
Italy:	T., 1., 20, 26	2	'	
Turinapan	July 20-26	2		Watel Ten 1 Tule 21. Cases 414.
арап		• • • • • • • •		Total Jan. 1-July 31; Cases, 414;
Kobe	June 19-23	1		deaths, 89; exclusive of Taiwan.
Nagasaki	May 18-Aug. 30	58	18	
Taiwan (Formosa)	May 3-Aug 8	15	16	
Yokohama	May 3-Aug. 8 June 23-29	1		
dexico:		-		
Chihuahua	May 18-Sept. 6		45	
Juarez	Aug. 1	2		
Mazatlan	June 17-Sept. 1		4	
Mexico	Jan. 17-Feb. 21	99	16	
Monterey	June 30-Sept. 20		9	
Tampico	May 11-July 31		70	
Vera Cruz	June 1-Sept. 5	16	6	
Norway:		1	1	
Trondhjem	June 1-Aug. 31	14		
Peru:	<b>.</b>			
Callao	June 22		••••••	Decreased.
	do	• • • • • • • • • •		Do.
Portugal:	June 14-Aug. 15	9	1	
Lisbon	June 14-Aug. 15	9		
Batum	Feb 1-Apr 20	7	ı	
Moscow	Feb. 1-Apr. 30 May 10-Aug. 8	45	7	
Odessa.	May 10-Aug. 4	6	'	•
Riga	May 31-July 25	14		•
St. Petersburg	May 24-July 11	84	28	
Vladivostok	May 24-July 11 Apr. 22-May 13	8	1	
Warsaw	Feb. 1-May 2	146	61	
ervia:				

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

## Reports Received from June 27 to Oct. 9, 1914—Continued.

#### SMALLPOX-Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Siam: Bangkok Spain: Almeria Barcelona Cadiz Madrid Valencia	June 12-July 11 July 1-31 June 14-July 31 May 1-31 June 1-Aug. 31 June 7-Aug. 15		1 28 5 6 13	
Switzerland: Cantons— Basel Geneva Grisons Zurich Turkey in Asia: Beirut Damascus Jerusalem Mersina Smyrna	May 31-June 20 July 5-11 June 7-13 July 19-Aug. 8 June 1-Sept. 5 Mar. 15-Aug. 1 May 3-July 25 Aug. 2-8 May 13-June 13	1 1 2 61 845 33 2	26 429 2	
Trebizond Turkey in Europe: Constantinople Saloniki Union of South Africa:	May 19-Sept. 5 June 14-July 25 May 31-Aug. 29	• • • • • • • • • • • • • • • • • • • •	5 49	Present.  June 6; Present in a mild form among 20,000 refugees from Asiatic Turkey, Chio, and Mitylene.
Pretoria	May 9-23	1		

## SANITARY LEGISLATION.

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

#### EAST CHICAGO, IND.

Milk and Milk Products—Production, Care, and Sale. (Ord. 518, Apr. 21, 1914.)

SECTION 1. No person, company, or corporation shall engage in the production for sale, delivery, or distribution of milk in any form without a license or permit from the secretary of the board of health of East Chicago, Ind., as hereinafter provided. For the purpose of this ordinance the word "person" shall hereinafter mean individual, partnership, or corporation.

SEC. 2. All persons keeping one or more cows for the purpose of producing milk to be used or sold within the limits of the city of East Chicago, Ind., in any manner or form, and all persons selling, and delivery [sic] of same, shall comply with this ordinance and be subject to the provisions and penalties to be imposed.

Sec. 3. All persons desiring to engage in said business within said city of East Chicago shall make application for said license or permit in writing to the city controller upon blanks furnished by the board of health, who shall issue same to any person complying with the provisions of this ordinance upon payment to him of the following sums therefor: All persons selling and delivering milk within the city of East Chicago shall pay \$1 as a license fee, and the sum of 25 cents shall be collected for each license plate, which must be attached to all vehicles used in the distribution of milk and its products. All other persons selling or keeping milk, cream, ice cream, or other products for sale within the city of East Chicago, Ind., 50 cents, as a license fee. Every person producing milk for sale in the city of East Chicago shall obtain a permit to do so, the money which is collected, together with that received as fines for the violation thereof, if any there be, shall be used for the purpose of paying for the inspection of milk and expenses of enforcing this ordinance, and for no other purpose. The applicant shall also at the time he makes application for the license or permit present a written consent from each person from whom he obtains milk, granting permission to health officers, or their representatives, of East Chicago, Ind., free and open access to his dairy or premises for the purpose of making an inspection of the premises or herd, and upon consent of the owner of said herd to comply with the tuberculin test as hereinafter provided. Said producer's permit shall be in the following form:

I, \_\_\_\_\_, producer of milk sold in the city of East Chicago, Ind., grant permission to the health officer of said city, milk inspector, or any other member of the board of health of the State of Indiana, city of East Chicago, free and equal access to my dairy, herd, premises, utensils, wagons, and conveyances for the purposes of making inspection of the same so long or while milk of my production shall be sold in said city.

(Signed)

October 16, 1914 2798

Each license shall be good, unless sooner revoked, until March 1 following the date of issuance.

The city controller shall number each license or permit consecutively in the order of their issuance, and licensees shall at all times have said numbers displayed in plain large letters on the outside of each vehicle used in distributing or selling milk or its products under the provisions of this ordinance. Licenses or permits shall not be transferable.

SEC. 4. When an application for a license or permit has been made, it shall be the duty of the board of health or the milk inspector to investigate and report without unreasonable delay upon the herd and premises from which the milk comes, and the method of handling, storing, cooling, and distributing the milk and its products. A record of these examinations shall be kept on the score cards for the production of sanitary milk issued by the United States Department of Agriculture. A license or permit shall be granted to those only whose total scores reaches 450 mark given on said score card and deemed necessary to procure what is called "Good milk." This score card properly filled out by board of health or its inspector shall be attached to the application for license or permit and filed in the office of the city controller previous to the issuance of said license or permit.

SEC. 5. It shall be the duty of the board of health to ascertain if the cows from which the applicant proposes to obtain milk or its products for sale or distribution are free from tuberculosis and other infectious and contagious diseases. No cow shall be considered free from tuberculosis except after showing no response to tuberculin test as applied by any qualified person approved by the State veterinary and local board of health. The cow from which the applicant proposes to obtain milk and its products for sale and distribution shall be examined by the milk inspector before the city controller issues a license; and an examination of each of the cows in a herd from which milk is obtained for sale and distribution shall be made at least once a year thereafter, and each animal tagged in a manner to afford permanent record of the examination. and no license shall be granted to any applicant until the cows from which he proposes to obtain milk or its products for sale or distribution are shown to be free from tuberculosis and other infectious and contagious diseases. No milk or cream or their products shall be sold or offered for sale within the corporate limits of the city of East Chicago, Ind., from any cow added to the herd until such cow has been examined by a qualified person approved by the State veterinary and local board of health, and upon such examination found free from tuberculosis and other infectious and contagious diseases, and such examination shall have taken place within six months from the time it is proposed to add such cow to the herd from which any milk dealer or vender obtains milk or its products sold or offered for sale within the corporate limits of the city of East Chicago, Ind. In all cases the expenses of the person making the examination for tuberculosis or other diseases shall be paid by the owner of the cow or cows, provided that the application of the tuberculin test shall be optional with the persons licensed and granted permits under this ordinance until July 1. 1914, when the same shall be mandatory.

SEC. 6. For the purpose of assisting the dairymen the board of health may publish a leaflet for distribution among them containing information concerning the source, straining, cooling, storage, keeping, handling, conveying, temperature, and other treatment and condition of milk and its products. It shall also include information on the sanitary conditions imposed under this ordinance and the State law on dairymen, dairies, cows, ice, stables, wagons, pastures, buildings, rooms, utensils, and other apparatus and methods used in handling milk and its products.

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- SEC. 7. No milk and its products shall be offered for sale in the city of East Chicago, Ind., which is unwholesome, adulterated, or impure. After the passage of this ordinance milk shall be considered unwholesome, adulterated, or impure when it—
  - (a) Contains any preservative whatever.
  - (b) Has any water or other foreign substance added.
  - (c) Has a temperature of more than 60° F.
  - (d) Has, if milk, less than 3 per cent fat and 8½ per cent of solids not fat.
  - (e) Has, if cream, less than 18 per cent fat.
  - (f) Has not a specific gravity between 1.029 and 1.033 at 60° F.
  - (g) Comes from cows fed on swill, garbage, or brewery refuse.
  - (h) Is drawn from cows within 15 days before or 5 days after parturition.
- (i) Comes from localities where the attendants are affected with or exposed to infectious and contagious diseases.
- (j) Is placed in containers which are not properly cleaned and sterilized by steam.
  - (k) Shows by test more than 100,000 bacteria per cubic centimeter.
- SEC. 8. Skimmed milk, sour milk, or buttermilk may be sold if so plainly marked.
- Sec. 9. Milk or cream shall not be sold or offered for sale or delivered except in bottles or sealed cans, which sealed cans shall not be less than 1 gallon capacity, and which bottles or sealed cans shall not be used for any other purpose. Bottles and cans may be filled when at the dairy and such other places as the board of health or milk inspector has approved. The cleaning and sterilizing of all bottles and milk utensils shall be subject to the approval of the board of health or milk inspector.
- Sec. 10. All cream, milk, skimmed milk, or buttermilk to be consumed on the premises where sold shall be delivered to the purchaser in sealed containers as obtained from the dealer and must be properly labeled.
  - SEC. 11. No tickets shall be used more than once.
- Sec. 12. No milk shall be used or sold which comes from any place where there is a contagious disease until there is a fumigation of the premises by the health officer or his duly authorized agent and permission obtained in writing from the board of health. Bottles had in places where there is a contagious disease shall not be collected and used until after the disinfection under the direction of the health officer.
- SEC. 13. It shall be the duty of the board of health and the milk inspector to see that the provisions of this ordinance are complied with at all times. They shall at all times have the right to examine samples of milk.
- Sec. 14. That the inspection of milk and its products as provided for in this ordinance shall be done by the city health inspector under the direction of the city board of health.
- Sec. 15. For the purpose of carrying out the provisions of this ordinance, the board of health or authorized agents shall have the right at any time and at all times to enter the premises of any person licensed under this ordinance to examine and inspect the dairy, herd, milk and its products, and all utensils and whatsoever connected with its manufacture and sale, and to provide a sufficient amount of milk or milk products for examination and analysis; the result of such examination shall be made public and published. The board of health or milk inspector shall have equal right upon the premises of anyone from whom a licensee procures or has been given notice [sic] of his intention to procure milk, cream, skimmed milk, sour milk, or buttermilk and their products.

- SEC. 16. If ever upon examination any milk or milk products offered for sale or delivered in this city of East Chicago, Ind., is found to be unwholesome, adulterated, or impure, according to section 7 of this ordinance, the board of health or milk inspector shall, if deemed necessary, seize the same and destroy it or otherwise dispose of it; in such cases no compensation shall be made to owner thereof.
- SEC. 17. No person producing milk or its products for sale, or selling milk or its products in any manner or form within the limits of the city of East Chicago, Ind., who publishes or makes any false statement in regard to cows from which he obtains milk, having been examined for tuberculosis or any other infectious disease under the provisions of this ordinance or makes any untrue or false statement regarding the condition of his herd and purity of his milk and premises from which his milk comes, the method of handling the same, cooling, and distributing of his milk and its products, shall be deemed guilty of the violation of this ordinance and be subject to penalties it imposes.
- SEC. 18. The board of health is hereby authorized to purchase from time to time equipment as may be necessary for the purpose of testing milk and its products.
- Sec. 19. Any person, company, or corporation violating any of the provisions of this ordinance shall upon conviction thereof be fined in any sum not exceeding \$100 or by imprisonment in the county jail not exceeding 90 days, or by both fine and imprisonment, in the discretion of the court.

## Nuisances—Manure—Premises—Privies—Garbage—Trash. (Ord. 517, Apr. 20, 1914.)

- SECTION 1. That it shall be unlawful for any person, firm, company, or corporation to place, deposit, permit, or have upon their premises in said city, or upon their premises within 2 miles of said city, whether owned or leased by them, any one or more of the following unclean, insanitary, fly-producing, disease-causing conditions, to wit:
- (a) Animal manure in any quantity which is not securely protected from flies.
- (b) Filthy, littered, or trash-covered cellars, house yards, barnyards, stable yards, factory yards, vacant areas in rear of stores, and vacant lots.
- (c) Privies, vaults, cesspools, pits, or like places, which are not securely protected from flies and rats, or which are foul and malodorous.
- (d) Garbage in any quantity which is not securely protected from flies in galvanized-iron receptacles.
- (e) Trash, litter, rags, accumulations of empty barrels, boxes, crates, packing cases, excelsior, packing hay, straw, or other packing material, tin cans, lumber not neatly piled, or anything whatsoever in which flies or rats may breed or multiply, or which may be a fire danger.
- SEC. 2. It shall be the duty of the health officer, upon learning in any way whatsoever of the existence of one or more of the unlawful conditions described in section 1 of this ordinance, to notify the offender in writing, upon official blanks provided by the board of health, to remove or abate said unlawful conditions, stating reasonable time for such removal or abatement. In the event of refusal or neglect on the part of the notified offender to obey such order within the time limit named in said order, the health officer shall inform the street commissioner, upon a blank provided by the board of health, and it shall then be the duty of said official, and he shall have power and authority, to remove and abate the unlawful conditions; and he shall keep an accurate account of the cost and expenses thereof, which shall be paid from the city

treasury, upon sworn vouchers of the street commissioner, and said cost and expenses shall be a lien upon the property, to be placed upon the tax duplicate by the city controller, and shall be collected by law as other taxes are collected and duly paid into the city treasury.

### Garbage and Refuse—Care and Disposal. (Ord. 517, Apr. 20, 1914).

SEC. 3. The owner or owners, whether person, persons, firm, company, or corporation, of hotels, boarding houses, restaurants, cafés, saloons, flats, apartment houses, and private homes, shall, unless otherwise contracted for in writing between lessor and lessee, provide said hotels, boarding houses, restaurants, cafés, saloons, flats, apartment houses, and private homes with galvanized-iron fly-proof garbage cans, in sufficient number, of sufficient size, and of approved construction, to sanitarily care for and protect from flies all garbage produced by said hotels, boarding houses, restaurants, cafés, saloons, flats, apartment houses, and private homes, and the number of such garbage cans thus to be provided by such owner or owners shall not be less in number than one to and for each separate resident family, or of sufficient capacity for each apartment house.

SEC. 4. All garbage cans shall be placed and kept so the garbage collector can have ready and convenient access to the same, and said garbage cans shall be used to contain garbage only, and the term "garbage" shall include all kitchen and table refuse and remains of food substances, including waste paper, rags, sweepings, or other small, perfectly combustible material, but excluding all noncombustibles and heavy trash, which includes ashes, empty tin cans, empty bottles, empty glass cans, scrap iron, wire, metal articles, brick bats, broken stone or cement, broken crockery, broken glass, broken plaster, etc., and all such trash shall be kept in barrels, bins, or galvanized-iron receptacles or neatly piled to the satisfaction of the street commissioner, entirely separate from the garbage, and all garbage and trash, and garbage and trash receptacles shall be conveniently placed and kept so the garbage and trash collectors may have ready and reasonable access to the same: Provided, That no such trash shall be kept, placed, or piled containing any foul, malodorous, or decomposing matter, or matter liable to decomposition, or matter that will attract and breed flies, or that will attract and harbor rats, or that will permit of being scattered, littered, or blown about: And provided further, That no hot ashes or ashes containing fire or fire coals shall be placed in any trash receptacle or ash bin unless the same be absolutely fireproof or of metal construction. All disputes as to the convenient placing or location of garbage and trash receptacles between any person and the street commissioner shall be finally settled by the health officer of the city health department.

Sec. 5. It shall be unlawful for any person, firm, company, or corporation to place or mix with any garbage or other substance to be collected and burned in the city garbage crematory any ashes or other noncombustible material or article too large to be burned.

Sec. 6. It shall be unlawful for any person, firm, company, or corporation to throw, scatter, or dump any ashes in or upon any alley, street, gutter, or public grounds within said city, except same be placed under the direction of the street commissioner.

Sec. 7. It shall be unlawful for any person, firm, company, or corporation, except upon written permission of the street commissioner first obtained, to place, dump, or deposit, for a period of over 72 hours, anything whatsoever in or upon alleys, streets, vacant lots, city grounds, parks, or public places: *Provided*,

Building materials to be used soon in the construction of buildings may be stored to a reasonable degree in streets and alleys and on vacant lots.

SEC. 11. The said city shall systematically collect, remove, and dispose of the garbage, ashes, rubbish, and trash of all its citizens who shall faithfully comply with the provisions of this ordinance; but any person, firm, company, or corporation who shall fail or refuse to faithfully and promptly comply with the provisions of this ordinance shall promptly remove and dispose of their own garbage, ashes, rubbish, and trash at their own expense and in a sanitary manner, and upon their failure so to do, after notice by the street commissioner or health officer, it shall then be the duty of the street commissioner, and he is hereby given the power and authority, to remove such garbage, rubbish, or trash, as the case may be, at the expense of the offender, and he shall keep an accurate account of the cost and expense thereof, which shall be paid from the city treasury upon sworn vouchers of the street commissioner. Said cost and expense shall be a lien upon the property, to be placed upon the tax duplicates by the city controller, and shall be collected by law as other taxes are collected and duly paid into the city treasury.

SEC. 12. For the purpose of systematically and in a sanitary manner collecting, removing, and disposing of all such garbage, ashes, rubbish, and trash, the street commissioner is hereby charged and empowered to superintend the same, and is hereby authorized and directed to secure competent and efficient help to promptly collect, remove, and dispose of said garbage, ashes, rubbish, and trash as herein contemplated.

SEC. 13. Any person for the violation or nonperformance of any of the provisions of this ordinance shall, upon conviction thereof, be fined in any sum not less than \$1 nor more than \$25 for each separate offense.

### Stables; Care of-Manure; Care and Disposal. (Ord. 517, Apr. 20, 1914.)

Sec. 8. All stables, barns, or other shelters wherein animals are kept shall be cleaned daily in the months of April, May, June, July, and August, and all manure shall be kept in dark, water-tight, fly-tight bins, pits, or boxes, which shall be emptied and the manure hauled away when full or when ordered in writing by the health officer or street commissioner; and it is hereby further made unlawful to pile or dump any manure in or upon any street or alley. After cleaning stables or barns or other shelter where animals are kept the floors shall be sprinkled with a 10 per cent solution of crude carbolic acid or 5 per cent solution of formaldehyde or a 10 per cent solution of copperas, or liberally sprinkled with slaked lime, the crude carbolic acid solution preferred.

# Privies—Construction, Care, and Disposal of Contents. (Ord. 517, Apr. 20, 1914.)

SEC. 9. Unless connected with a sewer or situated within the sewer of water districts, each and every house, store, hotel, restaurant, factory, mill, or other building where people live or work shall be provided with a sanitary privy or outhouse by the owner or owners of the property, and said sanitary privy or outhouse shall be so constructed as to be rat and fly proof, so constructed as not to pollute the air or the earth, and so constructed as to be absolutely watertight, well ventilated, and to be convenienly located, all to the approval of the city health department: *Provided*, That where sewer or water connections can be had such privies or outhouses are hereby prohibited, and in such cases it shall be unlawful for any person, firm, company, or corporation to construct or maintain the same.

Sec. 10. It shall be unlawful for any person, company, firm, or corporation to fill up an abandoned privy vault, cesspool, or pit of any kind without first cleaning same to the bottom and sprinkling liberally with quicklime or other approved disinfectant.

### ELYRIA, OHIO.

### Fruits, Berries, and Vegetables—Care and Sale. (Reg. Bd. of H., May 30, 1914.)

SECTION 1. It shall be and is hereby made the duty of the health officer and the food inspector of the city of Elyria to inspect all fruits, berries, and vegetables which may be offered for sale within the city of Elyria, and to cause the arrest and punishment of any person, firm, or corporation who shall violate any provision of this regulation.

The health officer and food inspector are each authorized and directed to immediately confiscate and destroy any such fruits, berries, and vegetables when offered for sale in violation of this regulation.

- Sec. 2. No person shall bring into the city of Elyria for sale or shall sell or offer for sale any decayed or damaged fruits, berries, or vegetables.
- SEC. 3. All fruits, berries, and vegetables offered for sale in the city of Elyria, whether kept, exposed, or displayed in a storeroom, upon the walk, or street in front of a store, or upon a vehicle in a street of said city, and which fruits, berries, and vegetables are generally or frequently eaten while in their raw state or condition, shall be so covered or screened as to be protected from dust and flies and from contact with animals, and the same shall not be exposed or displayed in any street, public place inside or in front of any storeroom, or from any vehicle in a street unless the receptacle containing said fruits, berries, or vegetables is elevated at least 2 feet above the sidewalk, platform, floor, or landing upon which said receptacle rests.

While being brought into the city of Elyria for sale or to be offered for sale all fruits, berries, and vegetables shall be covered or screened from dust and flies.

In delivering to a purchaser within the city of Elyria any fruits, berries, or vegetables the seller shall keep the same covered or screened from dust and flies.

- Sec. 4. All persons exposing or displaying for sale within the city of Elyria, any fruits, berries, or vegetables, shall protect the same from being handled by the public by means of suitable covers or screens.
- Sec. 5. No person shall keep for sale or offer for sale in the city of Elyria, any fruits, berries, or vegetables, which are generally or frequently eaten while in their raw state or condition, while contained in any box, basket, or other receptacle, which has one or more times been used as a receptacle for fruits, berries, or vegetables. All receptacles containing fruits, berries, or vegetables, displayed or offered for sale in the city of Elyria, shall be free from decayed matter of every kind.
- SEC. 6. Any person found guilty of violation of any of the provisions of this regulation shall be fined in any sum not exceeding \$100, or imprisoned in the city jail for a term not exceeding 60 days, or both, but no person shall be imprisoned for any violation of this regulation for his 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.
- Sec. 7. This resolution shall be in force and effect from and after the earliest period allowed by law.

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#### ENID, OKLA.

# Communicable Diseases—Notification of Cases—Quarantine—School Attendance—Vaccination of School Children. (Ord. 871, Mar. 12, 1914.)

Section 1. It shall be the duty of every practicing physician of the city of Enid to make a report to the city superintendent of public health of all cases of scarlet fever, smallpox, diphtheria, or any cases of contagious or infectious diseases, as soon as discovered by him or coming to his knowledge.

Sec. 2. Upon receiving said report it shall be the duty of the city superintendent of public health to issue an order of quarantine to the mayor of the city. The mayor shall require a true copy of said quarantine to be served upon the person having such contagious or infectious disease and upon the person having charge of said person. Thereupon said person having such contagious or infectious disease shall be, by the city board of health, isolated and confined and all other such persons exposed to such contagious disease, shall, at the discretion of the board of health, be isolated and confined or quarantined; and any person having such disease or so exposed to such contagious or infectious disease who shall leave the place where he has been isolated by said board of health, or by any officers or any other persons acting under the order of the said city board of health, without the consent of said board, shall be deemed guilty of a misdemeanor.

Sec. 3. Any person confined or isolated or quarantined by order of said city board of health shall not be released from or relieved of said isolation or quarantine without an order from the city superintendent of public health.

Sec. 4. Whenever a physician in the city of Enid discovers a case of contagious or infectious disease he shall have the power and it is hereby made his duty to place into effect a temporary quarantine until the proper authorities can order a quarantine, and the city superintendent of public health, upon discovering a case of contagious or infectious disease, shall have the power and it is hereby made his duty to place into effect a temporary quarantine until the proper authorities can order a quarantine, and any person violating an order of quarantine so issued by a practicing physician or the city superintendent of public health shall be deemed guilty of a misdemeanor.

Sec. 5. The city superintendent of public health or any practicing physician may place in effect the temporary quarantine provided for by section 4 by serving an order of quarantine upon the person having such contagious or infectious disease, and upon the person having the charge of said person, or either of them.

Sec. 6. In case there is an epidemic or prevalence of contagious or infectious diseases in the city of Enid the board of health shall have power and they may, at their discretion, close or suspend any or all of the schools or public assemblages of the city of Enid, and the board of health may, in their discretion, require that all pupils admitted to the public schools or to any one of the public schools produce a certificate of vaccination prior to being so admitted, and the board of health may, in their discretion, exclude from the schools or any school in the city of Enid any pupil failing to produce satisfactory evidences of vaccination or of having had the contagious disease guarded against.

Sec. 7. Penalty.—Any person violating any of the provisions of this ordinance or any rule or regulation of the city board of health shall be deemed guilty of a misdemeanor, and upon conviction thereof in the police court of said city shall be fined in any sum not less than \$25 nor more than \$100, or imprisoned in the city jail flot more than 30 days, or by both such fine and imprisonment.

### EVERETT, MASS.

#### Spittoons—Required in Factories. (Reg. 56, Bd. of H., Apr. 6, 1914.)

Suitable receptacles for expectoration shall be provided in all factories and workshops by the proprietors thereof. Such receptacles shall be of water-tight material, built low, with broad bases, and receiving surfaces at least 9 inches in diameter. The minimum number shall be 1 receptacle for every 20 women and 1 for every 6 men employed in said factories or workshops.

### Stables—Air Space, Ventilation, and Lighting. (Reg. 43, Bd. of H., Feb. 16, 1914.)

(j) All stables and cow barns shall contain from four to seven hundred cubic feet of air space, and 3 to 5 square feet of light for each animal, and shall be property ventilated to the satisfaction of the board of health.

#### Burial. (Reg. 48, Bd. of H., Feb. 16, 1914.)

REGULATION 48. All undertakers shall make a return of a death within 48 hours when possible. Further, that all bodies shall be buried within five days of death, except as provided for in the regulation governing the burial of bodies dead of contagious diseases.

#### EVERETT, WASH.

# Communicable Diseases—Notification of Cases—Quarantine—School Attendance—Vaccination—Communicable Diseases of Animals. (Ord. 1589, Apr. 14, 1914.)

Sec. 24. Every physician in said city shall immediately report in writing to the health officer every patient he shall have sick with any contagious or infectious disease, or disease dangerous to the public health, and in said report shall state the name, age, sex, residence, and occupation of the patient, diagnosis of the disease, place where probably contracted, date of exposure, date of onset, and such other particulars as the health officer may from time to time by regulation require. If no physician is in attendance the householder on whose premises such disease exists shall make said report, giving such of the above information as is within the knowledge of such householder. The following diseases are hereby declared to be contagious or infectious and dangerous to public health, to wit: Actinomycosis, amebic dysentery, anterior poliomyelitis (infantile paralysis), anthrax, Asiatic cholera, chicken pox, diphtheria and membranous croup, echinococcus disease, epidemic cerebrospinal meningitis, favus, German measles, glanders, Japanese lung fluke disease, leprosy, malaria, measles, ophthalmia neonatorum, pellagra, plague, pulmonary and laryngeal tuberculosis, rabies, relapsing fever, Rocky Mountain tick or spotted fever, scarlet fever, scarlatina or scarlet rash, smallpox, trachoma, trichinosis, typhoid fever and paratyphoid fever, typhus fever, uncinariasis or hookworm disease, whooping cough, yellow fever, and all cases of so-called cedar, Cuban, Dobe, Egyptian, Japanese, kangaroo, Manila or Philippine itch, and such other diseases as are or may hereafter be declared to be contagious or infectious and dangerous to health, by the board of health of the State of Washington or by the board of health of the city of Everett.

SEC. 25. Every veterinary surgeon professionally attending any animal within the city of Everett which animal has the glanders, or farcy or other contagious disease, shall, within 24 hours, report the same to the health officer in writing,

stating the location of such animal, the name and address of the owner or person claiming control over the animal, and the type and character of the disease.

SEC. 26. Whenever it shall be deemed necessary by the health officer to establish the true character of any disease which he may believe to be communicable, a medical examination of the person or persons affected by such disease may be ordered, and such examination shall be permitted by all attendants and other persons seeking to prevent the same.

SEC. 27. That no principal, teacher, or superintendent of any school, and no parent or guardian of any child attending any school shall permit any child sick with any contagious or communicable disease, or any child residing in any house in which such disease shall exist, to attend school there until such time as the attending physician certifies and the health officer approves that it can be done without danger of communicating the disease to others.

SEC. 28. Any person who has been exposed to smallpox shall, when ordered by the health officer, be immediately vaccinated or isolated for such time as the health officer shall direct, but for not less than 16 days from the date of such exposure. If such person is not immediately vaccinated, the health officer shall make such rules and regulations in regard to the isolation of such person as may be necessary. Any person failing to comply with any of the rules and regulations made by the health officer shall be guilty of violating the provisions of this ordinance.

SEC. 29. Quarantine regulations.—That in case contagious or communcable disease occurs in the city the persons affected thereby shall, at the discretion of the health officer, be isolated or removed to such locality as the health officer may order and direct; and all buildings, clothing, property and premises, and vehicles which may become infected by the presence of persons infected by contagious or communicable disease shall be disinfected or fumigated at the expense of the tenant, occupant, or owner thereof, and such disinfection or fumigation shall be performed under the supervision or direction of the health officer: Provided, however, That in case of any indigent person or family said disinfection or fumigation shall be performed at the expense of the city.

Sec. 30. It shall, under the direction of the health officer, be the duty of the keeper of any hotel, tavern, boarding house, or public house, or the owner or occupant of any private residence where any person may be sick with any contagious disease, to close such house, or place, or portion thereof and keep it closed against all lodgers, customers, and persons desiring to enter or visit the same until such time as in the opinion of the health officer all danger of communicating the disease from any such house or place or portion thereof or the inmates thereof shall have passed, and no person or persons brought in contact with those so affected shall go about the city or in any common or public or private place so as to endanger the health of other persons, providing that the provisions of this section shall not apply to either the physician or clergyman attending on such sick person or persons.

Sec. 31. That no person shall be allowed to enter the city of Everett who is infected with any contagious or infectious disease, and no person shall bring or cause to be brought into said city any person or article liable to propagate a communicable disease.

SEC. 32. The board of health of said city, whenever and at such times as it may deem necessary, may elect and establish such sites, places, and boundaries as said board may deem necessary for quarantine purposes and may by proclamation require all boats, vessels, railroad cars, or other public conveyances bound for such city, before the same shall land or stop at any wharf, depot, or landing place or stopping place therein, to touch or stop at any or either of the sites, places, or boundaries so selected and established for quarantine pur-

poses and leave all such emigrants, travelers, or persons and all such sick, diseased, or unclean persons, with their stores and baggage, as in the opinion of the officers stationed at such quarantine sites, places, or boundaries shall be deemed proper on account of the existence or general report of the cholera, ship fever, or any contagious disease or diseases, apprehended to endanger the health of the city. Said board of health shall also have power whenever in its opinion such action is necessary to establish and maintain for such length of time as it may deem necessary a strict quarantine against such persons coming to said city of Everett from any other city or locality wherein the existence of any contagious disease is known or reputed, and in case of general epidemic to quarantine against all persons coming to said city from any locality, in either of which cases said board shall give notice of such quarantine by proclamation.

SEC. 33. Whenever it shall be deemed necessary to issue such proclamation it shall be the duty of the secretary of the board of health to send the same, together with the substance of the regulation for the quarantine and the period for which the same shall be enforced, unless sooner revoked, to such cities and places as said board may deem necessary.

Sec. 34. Said board of health shall also cause to be stationed at such quarantine sites, places, and boundaries, as it may deem suitable, one or more physicians or officers, whose duties shall be to go on board and examine all boats, vessels, or cars, or public conveyances so as aforesaid required to touch or stop at said quarantine, respectively, and then and there determine what emigrants, passengers, or persons, if any, shall stop at such quarantine; and it shall be the duty of all persons conducting or in charge of any such vessel, boat, car, or public conveyance to aid and assist any such physician or officer in the exercise of his duties. Said board of health shall also, in the event of a general quarantine against all persons coming to said city from any locality appoint such number of persons as it may deem necessary, whose duties it shall be to see that no person or persons enter within the limits of such quarantine district during the period that quarantine may be maintained, and during the time that such persons shall be so employed they shall be under the control and supervision of the health officer and subject to his orders.

SEC. 35. Any master of a vessel, conductor, captain, or person whatsoever who shall violate any clause, provision, or requirement, duty, or regulation of this ordinance, or who shall fail to comply with any requirement hereof, or who shall interfere with or in any manner resist any officer or agent of the city in the discharge of his duty as herein contemplated, or who shall commit any breach of the peace or be guilty of any act or thing calculated to defeat or interrupt the carrying into effect of any provisions of this ordinance, shall, upon conviction, be subject to a fine of not less than \$25 nor more than \$100 or to imprisonment for a period not exceeding 30 days, or to both such fine and imprisonment.

#### Drinking Water—Sources of Impure to be Closed. (Ord. 1589, Apr. 14, 1914.)

SEC. 36. Whenever the attention of the health officer is called to the water in any well, or cistern, or spring, or other source of supply in the city of Everett which, after careful examination, is found to be impure, contaminated, and unfit to drink, it shall be the duty of the health officer to serve in writing that [sic] such water shall not longer be used for drinking purposes, and it is hereby made the duty of the board of health to order the closure, filling up, or destruction of any well or cistern or other source of supply whose waters are found to be impure, unless after proper cleansing it is found that the water is healthful,

to the satisfaction of said board. Any tenant, owner, agent, or individual whatsoever who resists, opposes, or attempts to in any way interfere with said work of the said board or resists any properly authorized officer in the discharge of his duties shall be subject to the penalties herein provided.

### Slaughtering-Regulation of. (Ord. 1589, Apr. 14, 1914.)

- SEC. 21. No person shall kill or dress any animal, or permit the same to be done, within the inhabited portion of said city, nor shall any person throw or permit to be thrown any entrails, offal, horns, garbage, rubbish, or other offensive or putrid matter into any of the streets or alleys or public places or upon any vacant lot or upon any private premises in said city or to conceal the same upon his own premises.
- Sec. 22. No person shall kill or cause to be killed for the purpose of sale any pig, calf, or lamb less than six weeks old nor have in his possession with intent to sell the same the meat of any such animal killed when less than six weeks old within the city of Everett. All such meat found in the possession of such person shall be seized by the health officer and destroyed.

## Buildings and Premises—Care of—Abatement of Nuisances. (Ord. 1589, Apr. 14, 1914.)

- Section 1. Keeping premises clean.—No person being the owner, agent, or occupant of any lot or premises shall cause, suffer, or permit such premises, or any excavations, buildings, vessels, vehicles, sewers, privy, privy vaults, cesspools, sinks, drainpipes, or other thing thereon to become unclean, foul, nauseous, offensive, dangerous, or detrimental to health.
- Sec. 2. Throwing refuse on streets or property.—No person shall maintain or suffer to remain in or upon any premises owned, occupied, or controlled by him any filth, garbage, manure, offal, refuse, dead animals, putrid or decayed animal or vegetable matter, or any thing or substance which is foul, nauseous, offensive, or disagreeable odors or fumes; and no person shall cast, throw, or deposit, or cause to be cast, thrown, or deposited any of such matters or substances on or upon any premises, public or private, occupied or unoccupied, or upon any street, avenue, alley, park, or public place, or along any railway, or in any rivers, water courses, or bodies of water, or suffer or permit any cars, wagons, or vehicles laden with such substances to stand anywhere in the city of Everett.
- Sec. 3. Meats and hides.—No person shall keep or cause to be kept any stale, putrid, or stinking fat, grease, or meat, or keep any green or salted hides, pelts, or skins which have become foul, offensive, or nauseous by reason of their bad and unwholesome odor, nor shall any person keep any undressed hides, unless they are properly salted, for more than 24 hours, except in places where they are to be manufactured.
- SEC. 4. Carcasses.—No person shall keep, cast, or deposit, or cause to be kept, cast, or deposited on any private premises or on any public place or premises, or upon the garbage scow of the city of Everett, the carcass of any dead animal; nor shall any person permit the carcass of any dead animal which belonged to him at the time of its death, to remain undisposed of for more than six hours after its death, but shall promptly deliver the same to the garbage-scow tender.
- Sec. 5. Liquids.—No person shall cause or permit any foul or offensive slops, refuse, seepage, or drainage from cesspools and vaults or nauseous, foul, or offensive liquids or substances, or liquids or substances likely to become foul,

nauseous, or offensive, to flow or to be discharged into, over, or upon any adjacent premises, or any street, avenue, alley, or public place in said city.

SEC. 6. Water courses.—No person shall place, erect, or maintain any dam or obstruction of any kind in or across any stream, water course, brook, or ravine so as to cause water to stand and stagnate therein; nor shall any person obstruct any sewer, gutter, or drain in any manner whatsoever; nor shall any person cast or deposit, or cause to be cast or deposited in any stream, water course, brook, or ravine any noxious or offensive matter, or any stone, earth, straw, hay, manure, dead animal, or other article or substance; nor shall any person cast or deposit, or cause to be cast or deposited in any public or private well or cistern, spring, stream, or body of water from which water for drinking or domestic purposes is used, any filth, substance, or thing, or in any manner pollute or render impure such waters or water courses.

SEC. 12. Cellars, vaults, toilets, and cesspools.—No person shall suffer or permit any cellar, vault, private drain, cesspool, or privy, or sewer upon any premises belonging to or occupied by him within the limits of the city of Everett, to become nauseous, offensive, or injurious to the public health, and it shall be the duty of all occupants of property to keep all privies, privy vaults, cesspools, and drains on the premises occupied by them in a clean and sanitary condition.

SEC. 13. No person shall empty any vault, sink, privy, or cesspool, or dump any refuse matter of any kind, in the city of Everett without a permit from the health officer.

SEC. 20. Insanitary buildings.—Whenever the health officer shall deem any building, or any part thereof, for any sanitary cause, to be unfit for human habitation, he may issue an order to be served upon the owner, agent, or occupant requiring all persons to vacate such building or apartment at and until such time as shall be stated in said order. A copy of such order shall also be affixed conspicuously on said premises, and it shall be the duty of the owner, agent, lessor, or occupant of such building, and all other persons affected thereby, to at once comply with the terms of said ordinance.

SEC. 37. Duty to obey regulations.—It shall be the duty of persons within the city of Everett to maintain the premises of which they are the owners, agents, or occupants, in the condition required by the terms of this ordinance, and to obey all orders and regulations issued by the health officer or the board of health of said city. The failure or refusal of any person so to do shall be considered a violation of this ordinance, and the creation, maintenance, or suffering to exist of any condition contrary to the provisions of this ordinance shall be, and the same is hereby, declared to be a nuisance, and any person or persons creating, maintaining, or suffering the same to exist shall be deemed guilty of violating this ordinance.

Sec. 38. Abatement of nuisances.—Whenever the health officer shall find any person violating this ordinance or maintaining or permitting a nuisance in the city, or any premises in said city, he shall notify such person owning, occupying, or having charge or control of such premises, to abate such nuisance within such time as he shall deem advisable, not less than 24 hours from the time of the service of such notice as herein provided; in the event of the refusal or failure of such person or persons to abate such nuisance within said time, the health officer shall cause such nuisance to be abated at the expense of such person or persons, which cost may be recovered by the city from such person or persons in an action brought in the name of said city to recover the same

in any court of competent jurisdiction. Such notice shall be served in the following manner: By delivering a copy of the same to such person, or by leaving a copy of the same with some person at the residence of such person, or by posting a copy of the same in a conspicuous place on the residence premises of such person, or on the premises where such nuisance is created, permitted, or maintained. Such notice shall describe the nuisance and designate the premises where the same is created, permitted, or maintained with reasonable certainty. The giving or failure to give this notice shall not in any way affect prosecutions for violation of this ordinance.

### Garbage—Receptacles for Required. (Ord. 1589, Apr. 14, 1914.)

Sec. 19. Every tenement, lodging house, or restaurant keeper shall have proper and suitable tight-covered metallic cans or receptacles for receiving garbage and other refuse matter, the same to be of galvanized iron or other material, approved by the health officer.

# Privies and Cesspools—Construction and Care—Sewer Connections. (Ord. 1589, Apr. 14, 1914.)

Sec. 14. No building shall be used as a dwelling house in the city unless the same is provided with a privy vault or properly connected with a cesspool or sewer; all buildings and structures in the city used either as dwelling houses or for business purposes shall be provided with sufficient and adequate toilet accommodations.

Sec. 15. Sewer connections required.—No privy vault or cesspool for sewage shall be constructed in any part of the city of Everett where a sewer is provided in front of the property lines or in the alley at the rear of said lines, and no connection from any cesspool or privy vault shall be made with any sewer or drainpipe of a building for the purpose of affording surface drainage for a cellar without proper provisions against the access of sewer air into the building. When connection for sewerage is made with the sewer, any vault or cesspool on the premises so connected shall be cleaned out and filled with dirt.

Sec. 16. No person shall abolish, abandon, or neglect any privy, cesspool, or vault containing any excrement, filth, or other offensive matter, or fill up any such privy, cesspool, or vault upon any premises owned or occupied by such person or persons without first removing completely therefrom all filth, and then filling up the same with earth.

Sec. 17. No privy, vault, or cesspool, or other reservoir into which sewage or refuse is drained or deposited, shall be constructed or mantained in such condition or manner as to cause, through leakage or overflow, pollution of the soil near or about any habitation, or of any spring, well, or other source of water used for drinking or culinary purposes; nor shall the overflow from any such receptacle be permitted to discharge into any street, avenue, alley, or public place, or upon any private premises in such manner as to be dangerous to health.

Wherever such privy, vault, or cesspool is so situated as to be liable to be flooded with water upon the occurrence of rainstorms the health officer in his discretion may order such privy, vault, or cesspool cleaned out and filled with earth, and the privy or outhouse provided with water-tight boxes or iron pans.

SEC. 18. No person shall construct, without a written permit from the health officer, any privy, vault, or cesspool within 20 feet of any house or residence, or building in which perishable food is kept or stored, nor within 6 feet of the boundary line of the premises on which it is built.

The walls of such vault or cesspool shall be of brick, cement, stone, or sound plank of not less than 2 inches in thickness. The bottom of all vaults and cesspools shall be smooth and level in surface. The size of all vaults hereafter constructed shall be not less than 5 feet in depth, without special permit from the health officer, and 2½ feet by 4 feet in length and width. All vaults shall be fly proof and be closely boxed or walled at the top with the privy building, and a ventilating pipe of wood or other material of not less than 4 inches in diameter shall extend from the top of the vault to 2 feet above the building.

Every privy shall be provided with close-fitting covers, subject to the approval of the health officer. Every cesspool hereafter constructed shall be not less than 10 feet deep without special permit from the health officer, nor less than 3 feet in diameter if of circular form, nor less than 12 square feet in surface measurement if rectangular. Every cesspool shall be provided with close-fitting covering, subject to the approval of the health officer. No person or persons shall throw or deposit in any privy, vault, or cesspool any garbage, cans, crockery, or other rubbish whatsoever, and the owner or occupant of premises shall be responsible for the condition of all privies, vaults, and cesspools on the same.

### Stables; Construction and Care—Manure; Care and Disposal. (Ord. 1589, Apr. 14, 1914.)

Sec. 7. No person shall keep, use, or maintain in the city of Everett any pen, lot, stable, or place where horses, cattle, or fowls are kept which is foul, nauseous, offensive, or detrimental to health.

SEC. 8. Persons maintaining stables, stalls, or apartments in which horses or cattle are kept, or places where manure and solid or liquid excrement accumulates and collects, shall keep such premises in a cleanly, healthful, and wholesome condition, and shall allow no offensive smells and odors to escape therefrom, and shall thoroughly clean the same, and remove all manure and excrement therefrom at least once each week, and as often as directed so to do by the health officer: *Provided*, *however*, That the health officer may not require such cleaning to be done oftener than once a day.

Sec. 9. Every such stable or apartment in which horses or cattle are kept shall be provided with one or more tightly covered metallic cans or an inside manure pit or vault of sufficient capacity to care for all manure which may collect in such stable or apartment: Provided, however, That stables already constructed and now being used as such having outside vaults satisfactory to the health officer shall continue to use the same. All manure pits and manure cans shall be water-tight and fly proof, and the material and construction of the same shall be subject to the health officer's approval. All manure pits shall have ventilating shafts, which shall extend from immediately above the pit to above the main roof of the building, and no such shaft shall terminate within 20 feet of any window or other opening of an adjoining building. The floors of such stables or apartments shall be constructed of concrete or other material satisfactory to the health officer, and a permit shall be obtained from the city health officer to construct any floor other than one of concrete. All such stables and apartments shall be so constructed and connected with a public sewer, that all liquids and drainage from the same shall flow into the sewer and not into or upon any private or public premises.

Sec. 10. No stable shall be constructed or structure used as such without a permit from the board of health, and no permit shall be issued where such stables would be or become a nuisance.

SEC. 11. Persons wishing to allow animals to stand or run at large in yards surrounding any stable or building shall first obtain the written consent of the health officer.

### Offensive Trades-Permit Required. (Ord. 1589, Apr. 14, 1914.)

Sec. 23. It shall be unlawful for any person, firm, or corporation to carry on the business of slaughtering or rendering of any animal matter, or manufacturing the same into fertilizing material, or changing the form thereof in any manner by the use of heat, steam, fire, chemicals, or otherwise, or to erect or keep any bone-boiling establishment or depositary of dead animals or animal matter at any place or in any establishment anywhere within the city of Everett, except by permit of the board of health.

### Dogs-Muzzling Required-Diseased Animals May be Killed. (Ord. 1603, June 2, 1914.)

SECTION 1. It shall be unlawful for any person to cause or permit any dog owned or kept by him or under his control to run at large on any street, alley, hall, saloon, office, store, market, confectionery store, or other store during the time that said place is open for public business, or in any hallway in any building occupied by two or more families within the city of Everett, at any time, unless such dog shall be securely muzzled so as to effectually prevent it from biting any person or animal: Provided, If at any time the board of health of the city of Everett shall determine that it is unnecessary to muzzle dogs, said board shall cause to be published in the official paper of the city of Everett a notice stating that it shall be unnecessary to muzzle dogs within the city of Everett during the time set forth in said notice; and after the publication of said notice it shall not be necessary to muzzle dogs as required in this ordinance during the time stated in said notice.

Sec. 2. Every person owning, keeping, or having charge or control of any animal which shows symptoms of hydrophobia or which has been exposed to said disease shall cause such animal to be securely confined until it is determined whether or not such animal has hydrophobia or that such exposure has not given such animal said disease. It shall be the duty of every person owning, keeping, or having charge of any animal which is mad or which has hydrophobia to immediately kill such animal or cause the same to be killed, and any animal affected by said disease may be killed by any policeman of the city of Everett. The body of any animal that has died of such disease or which, after showing symptoms of such disease, has been killed shall not be disposed of except as may be directed by the board of health.

Sec. 3. Nothing herein contained shall be held to require the muzzling of any dog while on private premises or while on any street, alley, or other public place or in any of the places mentioned in section 1 of this ordinance if such dog shall be led by a chain or in leash in such manner so as to prevent such dog from biting any person or animal.

Sec. 4. Any person violating any of the provisions of this ordinance shall, upon conviction, be punished by a fine in any sum not to exceed \$100.

### FITCHBURG, MASS.

### Foodstuffs-Protection of. (Reg. Bd. of H., May 13, 1914.)

Section 1. The dressed body or carcass of any animal, or any part thereof, or any bread, pastry, poultry, or other provisions that may be used as human food shall not be carted or carried through the streets or avenues of the city of

Fitchburg unless they are covered so as to be protected from dust, dirt, and files.

Sec. 2. No cherries, blueberries, blackberries, strawberries, or other berries, dates, figs, grapes, salted peanuts, cracked nuts of any kind, corn flakes, corn crisp, maple sugar, candy, cake, bread, nor any other article that may be used for human food, not ordinarily cooked, peeled, or washed, shall be hung, kept exposed for sale in any street or public place or outside of any shop or store, stand, or stall, or in the open windows or doorways thereof, unless they are wrapped, covered, or inclosed so as to be protected from dust, dirt, and insects.

SEC. 3. No vegetables or other articles which are to be used as human food shall be kept or placed or exposed for sale outside of any shop or store, market, or in any open doorways or windows where it is possible for such vegetables or other articles to be contaminated by dogs.

SEC. 4. Every person being the occupant or lessee of any room, stall, building, or place where any meat, fish, birds, fowl, milk, vegetables, butter, fruit, or other articles intended or held for human food shall be stored or kept or shall be offered for sale shall put and keep such room, stall, building, or place and its appurtenances in a clean 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 meat, fish, birds, fowl, milk, butter, fruit, vegetables, or other articles intended for human food shall put and preserve the same in a clean and wholesome condition and shall not allow the same or any part thereof to be poisoned, infected, or rendered unsafe or unwholesome for human food.

Sec. 5. No newspaper or soiled paper of any sort shall be used for wrapping articles designed for sale or delivery as human food.

Sec. 6. Every proprietor or manager of a store, market, bakery, dairy, café, lunch room, or any other place in the city of Fitchburg where a food or a beverage or confectionery or any similar article is manufactured or prepared for sale, stored for sale, offered for sale, or sold shall cause it to be screened effectually or effectually protected by power-driven fan or fans, so as to prevent flies and other insects from obtaining access to such food, beverage, confectionery, or other article, and shall keep such food, beverage, confectionery, or other similar article free from flies and other insects at all times.

SEC. 7. This regulation shall take effect on and after this date, and these regulations shall be kept posted wherever foodstuffs are manufactured or sold.

### Stables—Construction—License Required. Manure—Care and Disposal. (Reg. Bd. of H., May 4, 1914.)

Section I. Every person desiring to erect or to occupy a stable in the city of Fitchburg must present a petition to the board of health; said petition to be made out in form prescribed by the board. A plan must be submitted with the petition showing the proposed location of the stable on the lot, the location of the stalls, the location and description of manure bin, pit, or receptacle, and the ventilation shaft.

Sec. 2. The stable must be erected and complete in all its appointments before license to occupy is granted, and must not thereafter be enlarged or altered without special permit from the board of health.

SEC. 3. Each license issued shall expire on the last day of April succeeding its issue and shall not be transferable, and may be revoked at the discretion of the board.

<sup>&</sup>lt;sup>1</sup>These regulations were adopted in accordance with the act of Apr. 13, 1912. See Public Health Reports Dec. 13, 1912, p. 2098.

- Sec. 4. All stables and stables in the most thickly populated parts of the city in which animals are kept shall have water-tight floors.
- Sec. 5. Every person occupying a building where domestic animals are kept shall maintain therewith a bin or pit for the reception of manure and other stable refuse of sufficient size to hold the same pending its removal from the premises, and shall place therein the manure from said animal or animals and all stable refuse from said building, and shall not allow manure to remain outside said building. The bin or pit shall be so constructed as to exclude rain water and shall in all other respects be water-tight, except as it may be connected with the public sewer. It shall be so constructed as to prevent the ingress and egress of flies, and shall be properly ventilated.
- Sec. 6. Horse manure may be kept tightly rammed into well-covered metal cans or barrels, or in tightly covered, water-tight carts, for the purpose of removal in such cans, barrels, or carts, by special permission of the board of health.
- Sec. 7. Every person keeping manure in any of the thickly populated parts of the city shall cause all such manure to be removed from the premises at least once a month from May 1 to November 1, or oftener when required by the board of health.
- Sec. 8. Stables shall, where practicable, be connected with the public sewer and shall be kept in a clean and sanitary condition at all times, and ventilated to the satisfaction of the board of health.
- SEC. 9. Stables outside of the thickly populated parts of the city shall be subject to the above rules and regulations, with such reasonable modification as the board of health in its judgment believes the public health requires.
- Sec. 10. Owners and occupants of livery and other stables in the city shall not wash or clean their carriages or horses or cause them to be washed or cleaned in the streets and public ways.
- Sec. 11. Any building now in use for stable purposes that is not constructed in conformity with the above regulations shall be so reconstructed whenever in the opinion of the board of health the public health may demand it.
- Sec. 12. No manure shall be removed or carried through the streets of this city except in a tight vehicle with a covering so secured to the sides and ends of the vehicle as to prevent the manure in process of removal from being dropped or left in any street or way of the city.
- Sec. 13. A copy of these rules and regulations shall be kept posted at all times in each place licensed in accordance with these regulations.
- SEC. 14. The fee for a license to occupy a building for stable purposes shall be \$1.

#### FORT WAYNE, IND.

### Stables—Report to Board of Health Required. Manure—Care and Disposal. (Ord. 660, July 28, 1914.)

Section 1. Every person, firm, or corporation owning or occupying any building, or part of a building, within the corporate limits of the city of Fort Wayne, where one or more horses, mules, cows, or similar animals are kept, shall maintain in connection therewith a bin, pit, or other suitable receptacle for the reception of manure, and, pending the removal from the premises of the manure from the animal or animals aforesaid, shall place such manure in said bin, pit, or other suitable receptacle, and shall not allow the same to be overfilled or uncovered. The bin or pit or other suitable receptacle required by this ordinance shall be so constructed as to exclude rain water, and shall in all other respects be water-tight, except as it may be connected with a public sewer, and shall be

provided with a suitable cover constructed so as to prevent the ingress and egress of flies.

- SEC. 2. Every person, firm, or corporation having the use of any bin, pit, or other suitable receptacle for manure, and every person keeping manure shall cause all such manure to be removed from the premises at least twice every week between June 1 and October 31, inclusive, of each year, and at least once every week between November 1 of each year and May 31 of the following year, both dates inclusive.
- Sec. 3. No person who has removed manure from any bin, pit, or other receptacle, or any place where manure has been accumulated, shall deposit such manure in any place within the corporate limits of the city of Fort Wayne.
- SEC. 4. Every person, firm, or corporation using within the corporate limits of the city of Fort Wayne any building, or part of a building, as a stable for one or more horses, mules, or cows shall report that fact to the department of public health in writing within 30 days after this ordinance takes effect, giving his, her, or its name and the location of such stable; and thereafter every person, firm, or corporation occupying any building, or any portion of a building, within the corporate limits of the city of Fort Wayne, for the purpose aforesaid, shall report in like manner his, her, or its name and the location of said stable, within 5 days after the beginning of such occupancy of said building.
- Sec. 5. Any person violating or failing to comply with the provisions of this ordinance shall be fined in any sum not exceeding \$100.

### FRAMINGHAM, MASS.

## Communicable Diseases—Period of Exclusion from School. (Reg. Bd. of H., June 9, 1914.)

Children ill with communicable diseases shall be excluded from school until a ceritificate is obtained from the board of health and the attending physician, if there be one, that it is safe to have the pupil attend school. The minimum period of exclusion from school shall be as follows:

Scarlet fever, 5 weeks.

Diphtheria, until 2 negative cultures taken 24 hours apart are negative. The second culture to be taken by a representative of the board of health.

Measles, 2 weeks.

German measles, 7 days.

Chicken-pox, until skin or mucous membrane lesions are healed.

Whooping cough, 3 weeks.

Mumps, 3 weeks.

(Attention is called to the fact that the above-mentioned periods are the minimum or shortest periods after which a recovered case will be readmitted to school.)

All members of a household where a person is ill with a communicable disease shall be excluded from school until a certificate is obtained from the board of health. The minimum period of exclusion from school of such persons after they or the patient have removed from the house will be as follows:

Scarlet fever, one week.

Diphtheria, one week and until two negative cultures have been obtained.

Measles, two weeks.

Chicken-pox, three weeks.

Whooping cough, three weeks.

Children may attend school from a house in which there is a case of measles. German measles, or whooping cough if they can secure a physician's certificate to the fact that they have been immunized by a previous attack of the disease.

### GALESBURG, ILL.

### Milk and Cream-Production, Care, and Sale. (Ord. June 1, 1914.)

No person, firm, or corporation shall engage in the production, sale, delivery, or distribution of milk or cream in the city of Galesburg except in accordance with the provisions of this ordinance.

Section 1. Every person, firm, or corporation producing, keeping, or offering for sale milk or cream in the city shall annually, before the 1st day of April, make a written application to the superintendent of health for a permit to carry on such a business. No person, firm, or corporation shall engage in the sale or distribution of milk or cream in the city of Galesburg without first obtaining a permit to do so, and said permit shall be revoked if said person or persons fail to comply with the conditions of his or their permit or the regulations of the health department. The number of the permit and the owner's name or name of the corporation shall be placed on the outside of the vehicle used for delivery of said products. In the case of milk depots or stores where milk or cream is sold the permit shall be posted in a conspicuous place. No milk or cream shall be produced, kept, sold, or offered for sale in the city from any cow or cows within 15 days before parturition or 7 days after, or that are not free from all diseases dangerous to the public health, or that are kept in a stable that is not clean and in a sanitary condition, to the satisfaction of the department of health.

Sec. 2. No milk or cream shall be kept, produced, or offered for sale in the city unless it has been strained and cooled immediately after being drawn from the cow. Said milk or cream shall not be strained or cooled in any room which is not provided with tight walls and floors of such construction as will allow easy and thorough cleaning, and which is not kept constantly clean, or which is occupied by horses, cows, or any other animal, or which is occupied wholly or in part for sleeping purposes, and provisions made for the exclusion of dust, dirt, flies, and filth, to the satisfaction of the department of health.

SEC. 3. Milk or cream kept for sale in any shop, store, restaurant, market, bakery, depot, or any other establishment shall be stored in a covered box or refrigerator. No vessel containing milk or cream for sale shall be allowed to stand outside said cooler box or refrigerator except while a sale is being made. Every such box shall be properly drained, cleaned, and cared for as prescribed by the department of health.

Sec. 4. The commissioner of health shall investigate and take samples of milk and cream to determine the quality of the same, and he shall make, or cause to be made, an examination of the same, to determine whether or not it is adulterated or impure or is below the city standard in butter fats or total solids. He shall visit the dairies supplying milk or cream to the inhabitants of Galesburg, and all places where milk or cream is stored or offered for sale, as often as he deems it necessary. A complete record of the conditions found shall be kept in the office of the department of health and open to investigation by any resident of the city.

SEC. 5. All cans, bottles, or other vessels of any sort used in the handling or production of milk or cream shall be sterilized with boiling water or steam before they are again used for the same purpose; and all cans, measures, or other utensils made of metal shall be kept free from dust, dirt, cracks, and rust. Whenever such can or utensil is found by the inspector to be unfit for use, he shall notify the owner or agent of such an establishment of the same, and the owner shall cause the same to be put in satisfactory condition before using again.

- SEC. 6. No milk or cream shall be brought into the city of Galesburg for the purpose of sale which has been carried upon or in a vehicle which is not clean and free from offensive odors.
- SEC. 7. Every person, firm, or corporation engaged in the production, sale, or distribution of milk or cream in the city of Galesburg shall notify the department of health immediately on the occurrence of any case or cases of contagious or infectious diseases, either in himself or family, or among his employees or their immediate associates, and shall at the same time suspend the sale and distribution of milk and cream until authorized to resume the sale of the same by the department of health. No vessels handled by a person suffering from a contagious or infectious disease, or which is on the premises of a person in whose family or household there exists such a disease, shall be removed until it has been sterilized to the satisfaction of the health department.
- Sec. 8. No milk or cream shall be stored, delivered, transported, or offered for sale at a temperature exceeding 60° F.
- Sec. 9. All milk or cream sold in bottles shall be placed in said bottles at the dairy or depot; and no milk or cream shall be transferred from cans to bottles or other vessels on the street, except when transferred to vessels used by the purchaser at the time of delivery.
- SEC. 10. All bottles, cans, or other utensils used in the handling of milk or cream shall be used for that purpose only, and all bottles shall be cleaned by the purchaser of the milk or cream before returning to the distributor.
- Sec. 11. No milk or cream shall be sold or offered for sale under a label or bottle as pasteurized, unless the methods used in such pasteurization be acceptable and approved by the department of health.
- SEC. 12. Any milk or cream delivered in dirty bottle or any other vessel shall constitute an adulterant.
- Sec. 13. No dairy shall be maintained in an insanitary condition nor in insanitary surroundings. Insanitary conditions shall be deemed to exist whenever or wherever properly constructed barns, milk houses, and utensils are not provided; where the cattle are dirty, unhealthy, uncared for, crowded, fed on slops or other food forbidden by the ordinance of the city or State; where the premises are not kept clean and free from manure; where the udders of the cows are not washed in clean water and dried with clean cloths prior to milking; where the attendants do not wash; where the floors of the stable and the milk room are not provided with impervious material and the milk houses not screened; where the milk is not immediately cooled, strained, and removed from the barn; the floors and stables, milk rooms and milk denots shall be smooth and free from crevices, defects, and shall be water-tight. The walls and ceilings shall be smooth, tight, and free from unnecessary projections and shall be painted or whitewashed to the satisfaction of the health department. The floors shall be well drained and free from moisture and provision made for proper ventilation of the stable and proper lighting. No privy vault shall be in close proximity to the stable or milk house. All wells or springs or cisterns from which water is drawn or obtained shall be constructed or so situated as to satisfy the departmenut of health that it is free from any possible source of contamination.
- Sec. 14. No substance or compound shall be added to any milk or cream which is to be used or offered for sale in the city, and no substance shall be subtracted therefrom. Milk which contains less than 12 per cent of total solids or less than 3 per cent of butter fats or any adulterant shall be deemed impure and shall not be sold or offered for sale in the city. Cream shall contain 18 per cent butter fat. No milk shall be sold or offered for sale which contains more than 250,000 bacteria per cubic centimeter. No cream shall contain more

than 400,000 bacteria per cubic centimeter. No skim milk shall be sold unless the container in which it is kept has painted thereon the words "skimmed milk," of proper size as designated by the State food department, and where such skimmed milk is sold in milk depots, stores, or other places, a card shall be posted in a conspicuous place, setting forth that such milk is sold.

SEC. 15. Every hetel keeper, restaurant keeper, or boarding-house keeper who furnishes milk or cream to his or her guests or boarders shall be in all respects subject to the provisions of this ordinance, save the obtaining of a permit.

SEC. 16. Whoever shall violate any of the provisions of this ordinance shall, upon conviction, be subject to a fine of not less than \$5 nor more than \$100 for each and every offense.

#### GREENVILLE, S. C.

### Washerwomen—Inspection of Premises—Registration Required. (Ord. Feb. 27, 1914.)

SECTION 1. It shall be the duty of every washerwoman, laundress, or other person, except operators and employees of regularly licensed steam or hand laundries, who wash or launder clothing or wearing apparel for hire or pay, to register his or her name and address in the office of the city sanitary and health department.

SEC. 2. The commissioner in charge of the city sanitary and health department will cause a register to be kept in the office of said department in which shall be recorded the names and addresses of all such persons as shall report to said department under the provisions of section 1 of this ordinance, and that upon such name being registered it shall be the duty of the commissioner of sanitation and health to issue a certificate of registration without cost to each person so registering, and to make or cause to be made such investigation and inspection of the premises and paraphernalia (tubs, scrubbing boards, pots, ironing board, etc., said tubs to be of galvanized iron) of such persons as will enable said commissioner or inspector to determine whether or not said person shall be permitted to engage in such occupation.

SEC. 3. It shall be the duty of the holder of the certificate or permit provided for in section 2 of this ordinance to notify the office of the city sanitary and health department in person of any change in the address of such person, which notice shall be given within 36 hours after such change of address.

SEC. 4. Inspections provided for under section 2 of this ordinance shall be made at any reasonable hour in the daytime and as often as said commissioner may determine. The person making such investigation or inspection shall, as soon thereafter as practicable, return to the office of the sanitary and health department a written report (on blanks provided by the department) of the conditions found to exist at the time of such inspection.

SEC. 5. Any person may upon application to the office of the city sanitary and health department be furnished with a copy of the report of such inspection, and said copy shall be furnished free of cost to the applicant.

SEC. 6. Any person who engages in the occupation of a washerwoman or laundress or who washes clothing or wearing apparel for pay (except regularly licensed steam or hand laundries) without having first obtained a certificate of registration or permit as provided for in this ordinance shall be deemed guilty of a misdemeanor and shall be fined not less than \$1 nor more than \$100.

### HAMILTON, OHIO.

### Manure-Care and Disposal. (Reg. Bd. of H., May 1, 1914.)

Section 1. That no person, firm, or corporation shall deposit any manure or stable offal on any alley, lot, street, or other place in the city of Hamilton, except in a manure box constructed as hereinafter provided.

- Sec. 2. That all manure boxes in the city of Hamilton shall be made watertight and have a suitable close fitting lid which may be made of wood or wire screen not coarser than a No. 12 standard wire mesh.
- SEC. 3. That the lids of all manure boxes must be kept closed at all times except when in actual use, in the process of filling or emptying.
- Sec. 4. All manure boxes in the city of Hamilton must be cleaned at least twice a week and sprayed with a solution of lime or some other disinfectant.
- Sec. 5. That all violations of this order or regulation shall be punished as provided by law.

### Street Cars—Heating, Cleaning, and Ventilating. (Reg. Bd. of H., Jan. 6, 1914.)

Section 1. That all persons, firms, or corporations operating street cars in the city of Hamilton, Butler County, Ohio, including the forward end or vestibule of such cars occupied by the driver or motorman, be required to maintain therein a temperature of 50° F, or above.

SEC. 2. That all persons, firms, or corporations operating street cars in the city of Hamilton, Butler County, Ohio, he required to thoroughly ventilate the same as to [sic] provide ample and sufficient fresh air in proportion to the number of passengers occupying said car, and that the ventilator shall be kept open at all times in the forward end of the car, and more ventilators shall be opened if the number of passengers occupying said car is such that one ventilator does not provide sufficient fresh air.

Sec. 3. That all persons, firms, or corporations operating street cars in the city of Hamilton, Butler County, Ohio, are hereby required to keep the same in a clean and sanitary condition, and thoroughly scrubbed throughout at least once each week. All cars and fixtures must be thoroughly swept and dusted daily before being placed in operation.

Sec. 4. Any violation to this order or regulation shall be punished as provided by law.

#### HAMMOND, IND.

### Privies—Not Allowed Where Sewers Have Been Constructed. (Ord. 1194, May 6, 1914.)

Section 1. No privy vault shall be allowed upon any premises abutting upon any street or alley in the city of Hammond in which a sewer has been constructed and accepted, and it is hereby made the duty of the owner of every dwelling house, hotel, apartment house, tenement house, factory, store, or other building situate within the corporate limits of the city of Hammond, Ind., and abutting upon or adjacent to any street or alley where a sewer has heretofore been or may hereafter be constructed and accepted, to immediately place in such building a closet and connect the same with the sewer in the street or alley adjacent to the building. The plumbing for said purpose to be done in accordance with the provisions of the ordinance of the city of Hammond regulating and prescribing the kind and character of plumbing to be done. It is hereby made the duty of the health department of the city of Hammond to

investigate all buildings where there are sewers in the street or alley adjacent thereto, and if closets have not been provided in accordance with the terms of this ordinance properly connected with the sewers the health department of said city shall serve notice upon the owners of said building to immediately install closets and connect the same with the sewer, and unless the same is done within 60 days from the time of the service of notice on the owner or his agent the owner or agent of said building, upon conviction for a violation of this ordinance, shall be fined in any sum not exceeding \$100 for each and every day that they shall refuse or neglect to install water-closets and connect the same by proper plumbing with the sewers in the street or alley upon which the property abuts.

SEC. 2. Any person, persons, firm, or corporation that may violate any of the provisions of this ordinance shall be fined in any sum not exceeding \$100.

### HAVERFORD, MASS.

Foodstuffs—Employment of Persons Having Communicable Diseases Forbidden—Wrapping in Newspapers Prohibited. (Reg. Bd. of H., May 17, 1914.)

SEC. 42. No person who has tuberculosis, a venereal or other communicable disease, shall work in a bake shop, nor in any other shop, store, or place where food is prepared or is kept for sale, and no person in charge of such bake shop, or place where food is prepared or is kept for sale, shall require, permit, or suffer such a person to be so employed.

SEC. 43. The wrapping of meats, fish, breadstuffs, dairy products, etc., destined for sale or delivery for food purposes, in newspapers or other unclean materials is prohibited.

