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FLEAS FOUND ON WILD ANIMALS IN THE BITTERROOT VALLEY, MONT.

By L. H. DUNN, Assistant Entomologist, and R. R. PARKER, Special Expert, United States Public Health Service.¹

[Spotted Fever Field Laboratory, Hamilton, Montana.]

The Bitterroot Valley is situated in Ravalli and Missoula Counties in the western part of Montana. It is about 65 miles long and 9 miles wide at its broadest part, comprising an area of approximately 511 square miles. It extends nearly north and south, being hemmed in by a chain of foothills of the main Rocky Mountain continental divide on the east, while the Bitterroot Range of mountains borders it on the west and separates it from Idaho. These two ranges gradually curve and nearly surround the valley, approaching each other more closely at the southern end, or head of the valley.

The floor of the valley has an altitude of about 3,500 feet and contains many cultivated fields, orchards, etc. It is traversed throughout its length by the Bitterroot River, which rises at the south end of the valley.

On the east side of the valley the foothills of the Rocky Mountains have a gentle slope, and many cultivated areas may be found at some height above the floor of the valley. On the west side the mountains are more abrupt, and the land on the lower slopes at their base is rough and broken, a considerable amount of it being non-cultivable. A number of canyons extend westward among the hills.

Thickly timbered forest reserve areas extend along the upper slopes of the mountains on each side of the valley, and there is a small scattering growth of coniferous and deciduous trees on the floor of the valley, especially along the river.

Several passes lead through the ranges on either side and at each end of the valley.

The mean annual temperature is about 46° F.; the mean annual rainfall, approximately 11 inches; and the average yearly snowfall, 38 inches.

¹ Identifications and descriptions of new species by the senior author.

Rocky Mountain spotted fever has been present in this valley for a number of years, and during the investigations that have been carried on in connection with this disease many small rodents and other wild animals were captured or killed. This was especially the case during 1922, when the work was carried on more intensively than formerly and a greater number of animals was secured for examination. Practically all of these animals were obtained on the west side of the valley, in areas varying in altitude from 3,500 to 5,000 feet, and extending from the farm lands along the Bitterroot River to the forest reserve lands located well up in the mountains. While the ectoparasites principally desired from these animals were the spotted fever ticks (*Dermacentor venustus* Banks), fleas, lice, and other parasites were also collected when the opportunity permitted.

Although the 388 animals from which fleas were taken comprised but a small part of the total number of animals received at this laboratory, 2,275 fleas were secured, representing a variety of species and affording an interesting study on the flea infestation of wild animals in the Bitterroot Valley and on the host relationship. An annotated list of these fleas, with descriptions of the new species, is given below.

SPILOPSYLLUS INEQUALIS Baker.

This flea is the one most abundant on the three varieties of rabbits, cottontails, snowshoes, and jacks, prevalent in the valley. Practically all cottontails secured were heavily infested with this species. The infestations being so much heavier on these rabbits than on the snowshoes and jacks would indicate that the cottontail rabbit is the favorite host of this flea. However, it is quite possible that the habit of the cottontails of living in burrows, which probably affords a favorable place for propagation of the flea, may account for the difference in the number of fleas that infest the three varieties of rabbits, whereas the snowshoe and jack rabbits live in forms under trees, bushes, and tufts of grass which are usually somewhat exposed to climatic conditions and are therefore less favorable than the burrows for flea propagation. There are no striking seasonal changes in the prevalence of this flea. If any difference occurs, it is that they apparently infest the cottontails in greater abundance during the winter months. One cottontail secured December 22 was found to be harboring 129 specimens, and one taken on January 4 was infested with 62. This flea was also taken on coyotes, the occurrence on which, however, would be expected, because rabbits form an important food supply for these animals, especially during the winter months. Considerable variations are found in the taxonomic characters of this species when a large series of specimens are examined. The most marked of these variations occur in the number, size, and shape of the ctenidial spines, the number and arrangement of spines on the abdominal tergites and sternites, and the spines on the legs.

HOPILOPSYLLUS AFFINIS Baker.

This flea was found in sparse numbers on snowshoe rabbits, 23 specimens being collected from 12 animals. One specimen was found on a cottontail rabbit.

ODONTOPSYLLA SPENCERI, new species.

FEMALE.

Head.—Broadly rounded. Frontal tubercle small and quite high on the anterior margin of the head. Eye large and pigmented. Upper genal row of nine bristles; the lower row with three long, heavy, dark bristles. Many minute hairs in front of the upper part of the antennal groove and above the eye. The occiput with an oblique row of 6 bristles extending from the antennal groove and nearing the hind margin of the head, the first bristle of this row being very long; above this row a single bristle near the antennal groove. Numerous small hairs along the posterior margin of the antennal groove. The hind margin of head with about 18 bristles, 3 being grouped together at the lower angle on each side. The first antennal joint with numerous small hairs; second joint with a row of 6 bristles which exceed the third joint in length. The rostrum extends to apex of anterior coxae.

Thorax.—The pronotum has one row of about 10 small bristles, a second row of 12 large ones, and a ctenidium of 26 spines on the posterior margin. Mesonotum with bristles in four rows and some irregularly placed; the first two rows each having about 12 medium-sized bristles, the third with 10 long ones, and the fourth with 10 shorter ones. The metanotum with two rows of about 16 medium-sized bristles each and a third row with 10 large ones. Numerous bristles on the pleural plates.

Abdomen.—Abdominal tergites each with one row of 18 large bristles and a second one of 20 smaller ones. The first two tergites with a third row of about 14 small bristles and a few irregularly placed. The third, fourth, fifth, and sixth abdominal sternites each with a single row of from 6 to 8 bristles; the seventh with 12 long bristles.

Modified segments.—The eighth tergite with a number of bristles apically, some short and stout and others longer. Many bristles on tenth tergite. The style about five times as long as it is broad, with a long bristle at tip and several subapically. The substylar flap with several long bristles near the apical margin and a number of shorter ones basally.

Legs.—The fore coxa bears more than 50 bristles, those at the base being small, and about 5 long ones extending from the apical margin. Fore femur with a posterior marginal row of small bristles and about 14 irregularly placed on the outer side. Fore tibia with

seven pairs of heavy spines, the second, fourth, and seventh pairs being long. Hind coxa with many minute teeth in irregular rows on the inside, a number of bristles on the lateral surface anteriorly, and also a marginal row. Hind femur with posterior marginal row of bristles, two or three small hairs on the inner surface, two heavy, curved bristles posteriorly, and two slender, straight ones anteriorly at the apex. The hind tibia with two irregular rows of bristles on the outer surface, seven pairs of spines with a single one between the fourth and fifth pairs and an apical group of three on the posterior margin. The longest apical spine of the hind tibia extends to more than three-fourths the length of the first tarsal segment. The hind tarsal segments all heavily spined on the margins, the longest apical spine of the second segments nearly equals the third and fourth segments in length.

MALE.

Head.—Flattened on top. Six to eight bristles in upper genal row and three or four in the lower.

Modified segments.—Two antepygidial bristles on each side. Tenth tergite bears a number of long bristles. Manubrium long and narrow, with a slightly curved point at tip. The process bluntly rounded with one bristle and several small hairs at its apex. The exopodite twice as long as broad; upper inner border nearly straight and provided with a number of small hairs, lower border extending obliquely upward on the apical half to a slightly upturned, broadly truncated apex and bearing a number of small bristles along the margin. The ninth sternite with several stout bristles on the dorsal surface.

The male of this species is close to the male described as *dentatus* by Baker, differing from it mainly by having more bristles in the upper genal row and on the dorsal surface of the ninth sternite. This flea was found on cottontail and snowshoe rabbits. This species is named in honor of Surg. R. R. Spencer, officer in charge of this laboratory.

Described from 21 specimens.

Holotype: Male; from a snowshoe rabbit taken in the foothills of the Bitterroot Mountains west of Hamilton, Mont., April 7, 1922. The slide bears the record number 449-7.

Allotype: Female; from a snowshoe rabbit taken in Canyon Creek Canyon in the Bitterroot Mountains west of Hamilton, Mont., November 16, 1922. The slide bears the record number 1081-5.

The above type specimens have been deposited in the collection of the United States Public Health Service at the Hygienic Laboratory, Washington, D. C.

MICROPSYLLA, new genus.

This genus is founded on an extremely small male flea found on a field mouse. It is near *Neopsylla* and *Rhadinopsylla*, differing from the former mainly by having four pairs of spines on each fifth tarsal segment, and from the latter by the overlapping of some of the genal spines. Genotype: *Micropsylla peromyscus*, n. sp.

MICROPSYLLA PEROMYSCUS, new species.

Head.—Frons somewhat dome-shaped anteriorly with frontal notch causing a vestigial point. Rostrum barely reaches to end of fore coxæ. Eye absent. Five genal spines vertically placed, the third one pale and overlapped by the second. A lower genal row of 4 long bristles and an upper one of 4 small ones. Two oblique rows of 5 or 6 bristles each on either side of the occiput. About 14 bristles on hind margin of head, 2 at each lower posterior angle being small.

Thorax.—Pronotum with ctenidium of 16 spines and a row of 10 bristles. Mesonotum with a row of 10 medium sized bristles and one of 8 smaller ones. Metanotum with a posterior row of 12 bristles and an anterior row of 10 small ones. Mesosternite with 3 bristles. Metasternite not divided and bearing 1 bristle.

Abdomen.—Tergites each with one row of 10 strong bristles and a second one of from 6 to 10 smaller ones. The sternites each bear a row of 6 bristles.

Legs.—Fore tibia with apical spine extending beyond apex of second tarsal segments. Hind coxa with a patch of about 17 minute teeth on the inside. Hind femur with 2 slender bristles near the apex. Hind tibia with 6 pairs of spines on posterior border and 1 pair and a group of 3 on the anterior apical margin, the middle spine of the group of 3 being more than twice as long as the other 2. Longest tibial spine as long as the first segment. Apical spine of first segment as long as second segment and apical spine of second as long as the third and fourth segments together. Fifth tarsal segments on all legs with 4 pairs of lateral spines and a pair of lateral apical bristles, these segments on the mid and hind legs also bearing a pair of ventral apical bristles.

Modified segments.—No antepygidial bristle. Several long, slender hairs on pygidium. Tenth tergite with few small bristles posteriorly. Substylar flap with small group of weak bristles apically. Manubrium short, slightly curved and pointed. Process with upper part extending posteriorly and bearing a weak bristle on lower part anterior to insertion of exopodite. Exopodite narrow, not quite reaching to level of upper part of process and convex posteriorly. Ninth sternite pointed at apex and bearing a few small bristles or

ventral and dorsal borders. Eighth sternite with three bristles on each side, the middle one of each being greatly the longest.

Length 1 mm.

Described from a single male specimen, the holotype, taken from a white-footed mouse captured in Lolo Canyon, at the mouth of Bear Creek, three miles west of Woodman, Mont., May 6, 1922. The slide bears the record number 468-6, and is in the collection of the senior author.

CTENOPSYLLUS RAVALLIENSIS, new species.

FEMALE.

Head.—Occiput nearly flat dorsally. Frons strongly rounded to the vestigial frontal notch, the lower portion sloping backwards. The antennal groove extends to upper margin of the head. Eye absent, being merely represented by a small, round, thickening of the chitin. Two heavy ctenidial spines are inserted at the posterior border of the gena, below the eye spot. Either side of the frons has a marginal row of 7 bristles and 4 short black spines, the latter occurring near the frontal notch, with 2 of the bristles above them and the other 5 below on the sloping lower portion of the frons. Lower genal row with 2 bristles, upper row with 2, and a single bristle placed above the upper row. Seventeen short bristles and 1 long one on each side of the occiput anterior to the hind marginal row, the long bristle arising near the hind margin of antennal groove and extending beyond the apex of the occiput. Hind margin of occiput with 8 bristles on each side, a short, heavy, black one being at each lower posterior angle. The mouth parts extend to slightly beyond the middle of the anterior coxa.

Thorax.—Pronotum with ctenidium of 24 spines and an anterior row of about 10 long bristles. The mesonotum bears a posterior row of 10 bristles, 2 irregularly curved rows of 14 bristles each, 2 shorter curved rows of about 10 each, and a transverse row of about 16 very small bristles anteriorly. The metanotum with from 8 to 10 large bristles in a posterior row and about 20 smaller ones irregularly placed anteriorly. Mesosternite with 6 bristles on episternum, 5 being in a row and 1 placed singly, 7 irregularly arranged bristles on the epimerum and 2 large and 1 small one on the stigmal plate. Metasternite with 2 bristles, 1 large and 1 small, on the episternum and 1 long, heavy one on the sternum. There seems to be considerable variation in the number and arrangement of bristles on the pleural plates of specimens of this species.

Abdomen.—Each tergite with two rows of bristles, anterior row on each tergite except the seventh containing about 10 small bristles, the seventh bearing only 2; the posterior rows on the second, third,

and fourth tergite contain 14 large bristles, the fifth and sixth each have 10, and the seventh has about 12. Small teeth on either side of dorsal margin as follows: One on metanotum, 2 on first tergite, 2 on second, 2 on third, 1 on fourth, and 1 on fifth. The middle abdominal sternites each with a row of 8 bristles.

Legs.—Hind coxa with a few bristles on outer lateral surface near the anterior margin apically. Hind femur with a posterior marginal row of about 14 small bristles, a subapical row of 4 large bristles and 2 curved spines, 1 long and 1 short, at apex. Hind tibia with 4 long spines, 2 being set together near the base and 13 short ones on the posterior margin: a row of 9 bristles on the outer lateral margin. Spines on tarsal segments short. The first pair of spines on fifth segment located near the median line, almost between the second pair.

Modified segments.—Four antepygidial bristles on each side, the inner one being less than half the length of the outer three. The number of antepygidial bristles varies in this species, some examples apparently having 4 on each side, others having 4 on one side and 3 on the other and still others having 3 on each side. Numerous small bristles on eighth tergite. A small mass of bristles on tenth tergite. Style short and stout, being less than twice as long as wide, with 1 subapical and 4 apical bristles. Substylar flap small with several stout bristles at apex and lower margin. One long bristle located well below the pygidium.

MALE.

Modified segments.—Three antepygidial bristles on either side, the middle one of each set being more than twice the length of either of the outer ones. Two bristles on the lower lateral border of the ninth tergite just below the pygidium. Tenth tergite with about 6 short bristles at apex. Manubrium of medium length, slightly curved upward and pointed at tip. Upper part of process extending posteriorly. Exopodite relatively small, roughly triangular in shape, does not quite reach upper margin of process and has 3 bristles and several small hairs on the posterior border. Ninth sternite curved ventrally and bearing a row of small bristles. Eighth sternite with heavy bristles near apex.

Eleven specimens of this flea were found on two pack rats taken at the southern end of Ravalli County, for which county the flea was named.

Holotype: Male; from a pack rat taken on Tin Cup Creek, in the foothills of the Bitterroot Mountains southwest of Darby, Mont., August 31, 1922. The slide bears the record number 199-6.

Allotype: Female; from a pack rat taken on Spoon Creek in the foothills of the Bitterroot Mountains southwest of Darby, Mont., August 16, 1922. The slide bears the record number 161-6.

The above type specimens are deposited in the collection of the United States Public Health Service at the Hygienic Laboratory, Washington, D. C.

CATALLAGIA CHARLOTTENSIS Baker.

Four specimens of this flea were collected, one on a snowshoe rabbit, one on a chipmunk, and two on a forest white-footed mouse.

HYSTRICHOPSYLLA DIPPIEI Rothschild.

Specimens of this large flea were found on a chipmunk and a pine squirrel.

NEOPSYLLA INOPINA Rothschild.

This species was taken on ground squirrels, on a woodchuck, and on a snowshoe rabbit.

NEOPSYLLA WENMANNI Rothschild.

Seven specimens of this flea were collected from a white-footed mouse; also two from two pine squirrels.

NEOPSYLLA HAMILTONI, new species.

FEMALE.

Head.—Rounded anteriorly. Frontal notch small. Rostrum half the length of fore coxæ. Eye absent. Gena with 5 long ctenidial spines, the middle 3 longest. Upper genal row of 5 bristles; lower row with 2 long ones, 1 placed on anterior margin of antennal groove and the other midway between the groove and the maxillæ. Occiput with 6 bristles, arranged in two oblique rows, on either side, and a marginal row of 10 bristles.

Thorax.—Pronotum with a ctenidium of 22 spines and a row of 10 bristles. Mesonotum with one row of 8 medium-sized bristles and two rows of very small ones. Metanotum with one row of 8 large bristles and a second one of 10 smaller ones. Mesosternite with 5 bristles. Metasternite with 1 bristle on episternum and 1 on sternum.

Abdomen.—Tergites each with a row of 12 large bristles and a second row of 8 or 10 smaller ones. First and second tergites each bears 3 small, black teeth on either side, the third has 2 and the fourth 1. Each of the sternites bears a single row of 6 or 8 bristles.

Legs.—Fore tibia with spine reaching to middle of third tarsal segment. Mid tibia with spine reaching to middle of second segment. Hind coxa with small teeth on inside. Hind femur with a row of small bristles on posterior margin and two on anterior margin near apex. Hind tibia with five pairs of spines and one single one, the latter proximally. Longest tibial spine about three-fourths as long as the first tarsal segment. First segment of hind legs with a spine

as long as the second segment, the latter with a spine reaching nearly to the middle of the fourth segment. Fifth segment on mid and hind legs with four pairs of lateral spines and a pair of lateral apical bristles.

Modified segments.—Two antepygidial bristles of equal length on either side. Tenth tergite long posteriorly and bearing several bristles. Style long and slender with two apical bristles, one long and the other short. Substylar flap with deep notch on lower margin at base and bearing a basal group of small bristles and several longer ones near the apex. A group of stout bristles on the eighth segment below.

Described from one female specimen, the holotype, taken from a pack rat captured on Spoon Creek, southwest of Darby, Mont., August 16, 1922. The slide bears the record number 161-7, and is in the collection of the senior author.

CERATOPHYLLUS ACAMANTIS Rothschild.

The woodchuck is the favorite host of this flea, practically all of which animals that were secured being found heavily infested with this species. Although the infestations are heavy during all months that the woodchucks are active, these fleas are present in greater numbers during March and April, when the animals emerge from their dens after hibernating. At this time between 200 and 300 specimens may be found on many of the animals. This would indicate that the fleas greatly multiply in the dens during the winter months. This species is quite active and will bite man, the writer having received several bites from this species while collecting them from the animals.

CERATOPHYLLUS ACASTI Rothschild.

This species is found on the flying squirrel, being fairly numerous on these densely furred animals during all seasons of the year.

CERATOPHYLLUS AGILIS Rothschild.

This species was found to be quite common on pack rats taken in various areas throughout the valley. A few specimens were also collected from several other varieties of animals.

CERATOPHYLLUS BITTERROOTENSIS, new species.

Head.—Flattened above; well rounded in front. Frontal notch very small. Three good sized bristles in lower genal row and two small ones in the upper row, one of these latter being close to the antennal groove and the other on lower margin of head. A number of small hairs along front margin of antennal groove. Eye small, roundly pointed below and well pigmented. Gena acute posteriorly. One medium sized bristle located back of the antennal groove. A

number of slender bristles on hind margin of head and a large one at each lower angle. Antennal groove reaching to upper margin of head. Rostrum extending to about one-third of the fore femora.

Thorax.—Pronotum with a ctenidium of 20 spines and a row of 10 small bristles. Mesonotum and metanotum each with a row of from 6 to 8 small, light-colored bristles and a posterior row of 8 or 10 larger ones. Stigmal plate of mesosternite with 2 long bristles.

Abdomen.—Abdominal tergites each bears one row of about 12 bristles with a small hair between each 2 and a second row of from 4 to 8 small bristles. Sternites each with a row of from 4 to 8 bristles.

Legs.—Hind coxa with row of small bristles along anterior border, about 10 more on lateral surface, and 2 longer ones at the lower part of the notch in posterior margin. Hind femur with about 11 small bristles on the posterior margin with 1 large curved one at the apex; a single row of 7 bristles on the lateral surface and 2 longer ones on the anterior margin, 1 at the base and the other near the apex. Hind tibia with 5 pairs of spines and 3 single ones on posterior margin and 2 pairs on anterior apical margin. Longest spine at apex of tibia reaches about three-fourths of first tarsal segment. None of the hind tarsal spines appreciably longer than the following segment. Mid tibia with an apical spine longer than first and second segments combined.

Modified segments.—One antepygidial bristle on each side. Pygidium small and bluntly cone shaped. Tenth tergite with 3 long bristles at apex. Subapical flap with 2 bristles at tip. Manubrium short, pointed, and extending downward. Process with a rounded tip extending posteriorly on upper portion; slightly concave on lateral posterior margin with 2 slender bristles arising from the concavity. Exopodite reaches to level of process; flat on anterior border above the pedicle and convex on posterior border with 3 *pointed black spines* at margin and 1 bristle and some small hairs above. The ninth sternite bears 2 long bristles and several small hairs. Eighth sternite long and slender with 4 long bristles on the ventral surface near the tip.

Described from two male specimens.

Holotype: Male; from a pack rat captured on Spoon Creek southwest of Darby, Mont., August 16, 1922. The slide bears the record number 161-1, and is held by the senior author.

CERATOPHYLLUS CILIATUS Baker.

Eight specimens of this flea were collected from 5 chipmunks and 1 pine squirrel. The largest number found on an animal was 2.

CERATOPHYLLUS DIVISUS Baker.

Four specimens of this species were found on 4 pine squirrels.

CERATOPHYLLUS EUMOLPI Rothschild.

This species is commonly found on the yellow-bellied chipmunks, these small animals undoubtedly being the favorite hosts. A few specimens were also taken on pine and ground squirrels.

CERATOPHYLLUS IDAHOENSIS Baker.

Fleas of this species were found infesting a large percentage of the many ground squirrels examined. They appear to be more numerous in the early spring when the squirrels emerge from their winter hibernation than during the midsummer months, although they are commonly found throughout the season. It was with some hesitation that the writer first classified these fleas as *idahoensis*. This was owing to the minor differences present between them and the description of this species as given by Baker. However, after examining a series of 377 specimens and carefully studying the variation that occurred, it is believed that they may be safely placed in this species. This variation in minor characters seems to be more marked among specimens of this flea than in any of the other species examined during these observations with the possible exception of *S. inequalis*. This consisted of differences in the spines of the eighth segment, subpygidial spines, teeth or tergites, pronotal spines, bristles in genal rows, prominence of tubercle of frons, and in various other characters.

CERATOPHYLLUS LUCIDUS Baker.

This species was found on many pine squirrels and apparently becomes more numerous during the late summer months.

CERATOPHYLLUS POEANTIS Rothschild.

Ten specimens of this flea were collected from 3 side-striped ground squirrels.

CERATOPHYLLUS TELCHINUM Rothschild.

This species was taken on forest white-footed mice, mountain meadow mice, and a cottontail rabbit. Only 1 specimen was present on each animal with the exception of 1 white-footed mouse, which was found to be host for 8 of these fleas.

CERATOPHYLLUS TUBERCULATUS Baker.

Common on ground squirrels together with *C. idahoensis*, but usually not as numerous as the latter species. Minor differences of characters are frequently found occurring in specimens of this flea.

CERATOPHYLLUS WAGNERI Baker.

A large percentage of the forest white-footed mice that were examined were found to be harboring this species. Five was the largest number taken from one mouse.

CERATOPHYLLUS WICKHAMII Baker.

Practically all the pine squirrels secured were infested with this species, and these animals are apparently the favorite hosts. The largest number taken from one squirrel was 21. Twelve specimens of this flea were also collected from a mountain weasel, and 2 from a yellow-haired porcupine.

ANOMIOPSYLLUS NUDATUS Baker.

Eight specimens of this small flea were found on a western horned owl. Although taken from an avian host, this species is included in this list of fleas from mammals, owing to the fact that in all previous records of the occurrence of *nudatus*, small rodents have been the hosts. As the horned owl is predaceous in habits, and as its food consists largely of small rodents, it is a question whether this bird may be considered a normal host of this species of flea or merely a temporary one that had become infested from the small rodents on which it had preyed.

Further work on the fleas which infest the wild animals in this valley will undoubtedly disclose additional new species as well as other species previously described that are not included in the foregoing list.

Specimens of the new species described in this paper were sent to Surg. Carroll Fox, United States Public Health Service, at Washington, D. C., who compared them with the literature and with specimens in the National Museum and in his own collection.

Acknowledgments.—Thanks and appreciation are extended to Surg. R. R. Spencer, officer in charge of this station, for the interest that he has shown in this work and also for his assistance in collecting many of the fleas; and to Surg. Carroll Fox.

Host Index.

The following host index illustrates the species and comparative prevalence of the fleas found on the various wild animals in the Bitterroot valley. The numbers following the names denote the number of fleas or animals of the variety indicated; e. g., "cottontail rabbits, *Sylvilagus nuttalli*, 31," signifies that 31 cottontail rabbits were found infested with fleas of various species; and "*Spilopsyllus inequalis*, 724," indicates that 724 fleas of the species *S. inequalis* were collected from the 31 cottontail rabbits, etc.

- Cottontail rabbits, *Sylvilagus nuttalli*, 31:
Spilopsyllus inequalis, 724.
Odontopsyllus spenceri, 12.
Ceratophyllus idahoensis, 5.
Ceratophyllus wagneri, 3.
Ceratophyllus acamantis, 2.
Ceratophyllus agilis, 2.
Ceratophyllus telchinum, 1.
Hoplopsyllus affinis, 1.
- Snowshoe rabbits, *Lepus bairdi*, 28:
Spilopsyllus inequalis, 68.
Hoplopsyllus affinis, 23.
Odontopsyllus spenceri, 9.
Ceratophyllus agilis, 2.
Ceratophyllus idahoensis, 2.
Ceratophyllus charlottensis, 1.
Ceratophyllus wagneri, 1.
Neopsylla inopina, 1.
- Jackrabbits, *Lepus campestris*, 2:
Spilopsyllus inequalis, 8.
- Ground squirrels, *Citellus columbianus*, 94:
Ceratophyllus idahoensis, 363.
Ceratophyllus tuberculatus, 91.
Neopsylla inopina, 15.
Ceratophyllus eumolpi, 9.
Ceratophyllus poeantis, 4.
Spilopsyllus inequalis, 3.
Ceratophyllus lucidus, 1.
- Pine squirrels, *Sciurus hudsonicus richardsoni*, 81:
Ceratophyllus wickhami, 247.
Ceratophyllus lucidus, 59.
Ceratophyllus eumolpi, 9.
Ceratophyllus divisus, 4.
Ceratophyllus agilis, 2.
Neopsylla wenmanni, 2.
Ceratophyllus ciliatus, 1.
Ceratophyllus idahoensis, 1.
Ceratophyllus tuberculatus, 1.
Ceratophyllus wagneri, 1.
Hystriopsylla dippiei, 1.
Spilopsyllus inequalis, 1.
- Flying squirrels, *Sciuropterus alpinus*, 7:
Ceratophyllus acasti, 51.
- Side-striped ground squirrels, *Callospermophilus lateralis cinerascens*, 3:
Ceratophyllus poeantis, 10.
- Yellow-bellied chipmunks, *Eutamias luteiventris*, 44:
Ceratophyllus eumolpi, 82.
Ceratophyllus ciliatus, 7.
Hystriopsylla dippiei, 4.
Catallagia charlottensis, 1.
Ceratophyllus wickhami, 1.
- Woodchucks, *Marmota flaviventer*, 19:
Ceratophyllus acamantis, 294.
Ceratophyllus idahoensis, 4.
Ceratophyllus tuberculatus, 1.
Neopsylla inopina, 1.
- Forest white footed mice, *Peromyscus maniculatus artemisiae*, 13:
Ceratophyllus wagneri, 19.
Ceratophyllus telchinum, 10.
Neopsylla wenmanni, 7.
Catallagia charlottensis, 2.
Microsylla peromyscus, 1.
- Rocky Mountain meadow mouse, *Microtus mordax mordax*, 1:
Ceratophyllus telchinum, 1.
- Pack rats, *Neotoma cinerea*, 6:
Ceratophyllus agilis, 43.
Ctenopsyllus ravalliensis, 11.
Ceratophyllus bitterootensis, 2.
Ceratophyllus idahoensis, 2.
Neopsylla hamiltoni, 1.
- Pika, *Ochotona princeps*, 1:
Ceratophyllus agilis, 4.
- Arizona weasel, *Putorius arizonensis*, 1:
Ceratophyllus wickhami, 12.
Ceratophyllus acasti, 1.
- Yellow-haired porcupine, *Erethizon exanthium*, 1:
Ceratophyllus wickhami, 2.
- Northern coyotes, *Canis latrans*, 4:
Spilopsyllus inequalis, 11.
Ceratophyllus acamantis, 1.
Ceratophyllus lucidus, 1.
- Western horned owl, *Bubo virginianus occidentalis*, 1:
Anomiopsyllus nudatus, 8.

AN EPIDEMIOLOGICAL STUDY OF WHOOPING COUGH IN AMSTERDAM.

In the Medical Officer for October 20, 1923,¹ Dr. B. H. Sajet and J. V. Gelderen, statistician, present the results of their epidemiological study of the occurrence of whooping cough in Amsterdam over a period of several years.

In view of the incompleteness of statistical analyses of various epidemiological factors in whooping cough, the study made by the investigators, although based on a comparatively small strength, is a contribution to the knowledge of this disease. The authors show the variation of the attack rate and death rate with respect to age, social condition, size of family, and nationality.

Use was made of the vital statistics records of the city, and additional information was obtained by means of an inquiry among school children, enabling the investigators to examine 13,500 cards which, at the request of the statistical office, had been filled in by parents of the pupils attending the highest and the lowest classes of the primary schools. This information proved unsatisfactory, however, as data upon which to base an estimate of the actual prevalence of the disease. According to the entries made by the parents on the cards, 36.1 per cent of 7,111 boys and 42.3 per cent of 6,479 girls had had whooping cough. It is inferred that many parents either did not remember, in some instances, that one or another of their children had suffered an attack, or had not recognized it, and that this occurred oftener among the poorer classes, among whom the lowest incidence was found, as compared with an attack rate of 55 per cent among the well-to-do. It was stated that the average probably lies nearer 65 per cent.

Age and mortality.—The deaths from whooping cough per 100 deaths in children under 14 years of age from all causes in Amsterdam and the whole of Holland are given as follows:

	1890-1899	1907-1916
Amsterdam.....	3.81	5.99
Holland.....	3.63	3.92

Of a total of 487 deaths from whooping cough in Amsterdam in the period 1908-1911, the mortality by age groups was as follows:

	Under 1 year.	1 to 4 years.	5 years and over.	Total.
Deaths from whooping cough.....	206	272	9	487
Per cent of total.....	42.3	55.9	1.8	100

From an examination of the school medical records, in which the history of children who had had whooping cough at pre-school age was also noted, the following data were found:

¹ The Control and Prevention of Whooping Cough. By B. H. Sajet, M. D., and J. V. Gelderen, statistician.

Age at which the patient contracted the disease.

	Under 1 year.	1 to 2 years.	3 to 5 years.	6 to 9 years.	10 years and over.	Total.
Boys.....	231	662	1,282	243	16	2,434
Girls.....	234	667	1,369	328	37	2,635

PER CENT ATTACKED IN EACH AGE GROUP OF TOTAL NUMBER ATTACKED.

	9.5	27.2	52.7	9.9	0.6	100
Boys.....	9.5	27.2	52.7	9.9	0.6	100
Girls.....	8.9	25.3	51.9	12.4	1.4	100

From these tables it is seen that nearly 90 per cent of the boys affected and 86 per cent of the girls had contracted the disease before reaching the age of 6 years, emphasizing the statement of Pfaundler that "The age of onset should be retarded."

• *Sex and mortality.*—A comparison of the death rates from whooping cough for Amsterdam and for the whole of Holland shows, characteristically for the disease, a higher rate among girls than among boys, the ratio of the rate among girls to that among boys during the period 1908–1911 being 100 to 88 in Amsterdam and 100 to 85.6 in the whole of Holland. It is stated not to have been determined definitely whether the higher death rate among girls represents a greater liability to attack or a higher case fatality rate, representing greater virulence of the disease in girls; although the information at hand indicated a higher attack rate as being the more important factor.

The rates of the history of present or previous attacks in boys as compared with girls was 85.1 to 100.

Influence of age and social condition upon incidence and mortality.—The following tables are presented to show the influence that social status appears to exert upon the incidence of and mortality from the disease at various age groups of school children.

Percentage of attacks in children of families from which children attended ordinary primary schools, advanced schools first class, or advanced schools second class.

ORDINARY PRIMARY SCHOOLS.

	Under 1 year.	1 to 2 years.	3 to 5 years.	6 to 9 years.	10 years and over.	Total.
Boys.....	9.6	29.8	51.7	8.3	0.6	100
Girls.....	9.2	27.0	53.3	9.3	1.2	100

ADVANCED SCHOOLS, FIRST CLASS.

	9.7	21.7	56.1	11.9	0.7	100
Boys.....	9.7	21.7	56.1	11.9	0.7	100
Girls.....	8.1	20.7	50.7	19.3	1.2	100

ADVANCED SCHOOLS, SECOND CLASS.

	6.7	12.2	41.1	36.7	.....	100
Boys.....	6.7	12.2	41.1	36.7	.....	100
Girls.....	7.5	16.1	39.8	32.3	4.3	100

The younger children of pre-school age of the ordinary or common primary schools are probably more frequently infected because of practically incessant contact with brothers and sisters and with neighbors' children. After the fifth year, however, less than 10 per cent contracted whooping cough, in sharp contrast with the 35 per cent contracting the disease at school age among the better class of schools.

Similar results are shown in the analysis of mortality among children of families from which children attend the different schools.

Percentage of deaths in children of families from which children attended the various classes of schools.

School.	Percentage of deaths occurring at specified ages.							Total.
	Under 1 year.	1 year.	2 years.	3 years.	4 years.	5 years and older.	Un-known.	
Ordinary primary school.....	39.1	33.2	16.1	6.7	2.6	2.1	0.2	100
Jewish ordinary primary school.....	41.0	28.2	17.9	10.3	.....	2.6	.....	100
Advanced school, first class.....	61.9	26.2	11.9	.....	.....	.....	.....	100

These figures seem to show, at least for the group of children studied, that among children attending the ordinary primary school, whooping cough claims victims even after their fifth year, the percentage decreasing slowly but gradually with increase in age. Among children of the better class (advanced school, first class) nearly two-thirds of the deaths are found in infants under 1 year, and no fatal case occurred after the third year. The information given in these two tables is summarized by the statement that the children of the poorer class contract the disease earlier than do those of the better class, resulting in a higher mortality in the first year of life and a slower decrease in the rate at the older age groups.

Size of family.—The average size of family in the three groups of school children studied were 4.37 in the ordinary primary group, 2.65 for the advanced first class, and 2.58 for the advanced second class.

As a rule, last or later born children in a family run more risk in contracting whooping cough than do first born. The following table gives the percentage incidence of whooping cough by age groups and school (social status) groups according to sequence of birth:

Influence of size of family on morbidity rate, with reference to sequence of birth.

ORDINARY PRIMARY SCHOOL.

Age group.	Incidence of whooping cough per hundred in—								Group.
	First born.	Second born.	Third born.	Fourth born.	Fifth born.	Sixth born.	Seventh born.	Eighth and later born.	
Under 3 years.....	33.2	40.7	42.3	41.5	35.8	33.6	30.0	36.2	37.7
3 to 5 years.....	56.1	50.9	49.8	48.8	54.6	52.1	58.9	50.1	52.6
6 years and over.....	10.7	8.4	7.9	9.7	9.6	14.3	11.1	13.7	9.7

ADVANCED SCHOOL, FIRST CLASS.

Under 3 years.....	23.6	39.1	36.1	37.0	22.2	63.6	38.5	¹ 30.4	.....
3 to 5 years.....	58.0	51.7	52.1	44.4	48.2	18.2	46.1	¹ 54.2	.....
6 years and over.....	18.4	9.2	11.8	18.6	29.6	18.2	15.4	¹ 15.4	.....

ADVANCED SCHOOL, SECOND CLASS.

Under 3 years.....	11.5	33.3	29.6	25.0	.....	.....	.....	¹ 21.3	.....
3 to 5 years.....	39.8	37.5	48.2	37.5	100.0	100.0	.....	¹ 41.5	.....
6 years and over.....	48.7	29.2	22.2	37.5	.....	.....	.....	¹ 37.2	.....

¹ Seventh and later born.

In all three classes of schools the percentage in the first age group (under 3 years) in first-born and only children is lower than that recorded for the second and third child of the family. The favorable condition for first and only children apparently becomes more pronounced as they rise in the social scale.

Effect of difference between age of infective case and susceptible contact.—In 106 infected families there were 353 susceptible children. At the time of the investigation only one child in each family had contracted the disease, leaving 247 contacts, of which number 114, or 46.2 per cent, subsequently developed whooping cough. The following table shows the number of susceptible contacts and the number of resulting infections grouped according to the difference in age between the infective patient and the contact.

	Difference in years between the age of the infective patient and that of the susceptible contact.									
	1	2	3	4	5	6	7	8	9	10 and over.
Number of susceptible contacts.....	51	74	23	26	7	15	9	7	10	25
Number of children infected.....	34	52	12	10	0	4	1	0	1	0

Nationality and death rate.—It is stated that the death rate among non-Jewish children was at least three and one-half times the rate recorded for Jewish children, comparison having been made in both the poorer and the better quarters of Amsterdam.

Among the suggestions offered for the control and diminution of the disease are direct measures, such as effective compulsory notification, segregation, especially exclusion of patient and contacts from school, "whooping cough homes," and improved home nursing. More drastic measures are recommended in the case of kindergarten schools and day nurseries. As for indirect measures, improved housing conditions, the encouragement of breast feeding of infants, and a better knowledge of hygiene and dietetics in the household are recommended.

A STUDY OF AFTERCARE IN POLIOMYELITIS INSTITUTED IN NEW YORK CITY.

The office of the New York City Department of Health in Queens Borough is attempting a study of the aftercare of poliomyelitis patients covering cases reported between June 1 and September 1, 1923, a satisfactory percentage of the parents of these patients having agreed to accept the advice of orthopedists or orthopedic clinics in regard to the aftercare of their children.¹

The list comprises 40 cases, of which number 4 patients died in the acute stage of the illness. A few, as will be noted, had no paralysis persisting. It is stated that these may have been questionable cases. The following data are given regarding the remainder of the cases, with special reference to the amount of paralysis persisting at the time of the tabulation and whether or not lumbar puncture was performed to confirm the diagnosis:

Number of reported cases.....	40
Number of cases which died.....	4
Number of cases in which some paralysis now exists.....	30
Number of cases in which no paralysis exists.....	6
Paralysis persisting:	
1 upper limb paralyzed.....	4
2 upper limbs paralyzed.....	0
1 lower limb paralyzed.....	12
2 lower limbs paralyzed.....	7
Bilateral paralysis.....	5
Unilateral paralysis.....	2
Number of cases which have been warned as to proper aftercare.....	30
Number of cases which will rely on private physicians to pursue aftercare.....	5
Number of cases which will rely on hospital or dispensaries for aftercare.....	15
Number of cases inconsequential enough to be cared for by parents.....	10
Number of cases in which lumbar puncture was performed.....	19

¹ Weekly Bulletin, Department of Health of the City of New York, Nov. 3, 1923.

DEATHS DURING WEEK ENDED NOVEMBER 10, 1923.

Summary of information received by telegraph from industrial insurance companies for week ended November 10, 1923, and corresponding week of 1922. (From the Weekly Health Index, November 15, 1923, issued by the Bureau of the Census, Department of Commerce.)

	Week ended Nov. 10, 1923.	Corresponding week, 1922.
Policies in force.....	55, 482, 292	51, 180, 358
Number of death claims.....	8, 792	7, 523
Death claims per 1,000 policies in force, annual rate.....	8.3	7.7

Deaths from all causes in certain large cities of The United States during the week ended November 10, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, November 15, 1923, issued by the Bureau of the Census, Department of Commerce.)

City.	Week ended Nov. 10, 1923.		Annual death rate per 1,000, corre- sponding week, 1922.	Deaths under 1 year.		Infant mor- tal- ity rate, week ended Nov. 10, 1923. ¹
	Total deaths.	Death rate. ²		Week ended Nov. 10, 1923.	Corre- sponding week, 1922.	
Total.....	6, 662	12.4	12.1	802	822	.....
Akron, Ohio.....	37	9.3	9.5	7	4	83
Albany, N. Y. ³	36	16.0	13.9	4	6	88
Atlanta, Ga.....	69	16.1	13.3	11	8	.....
Baltimore, Md. ²	192	12.9	12.8	16	24	47
Birmingham, Ala.....	65	17.3	11.2	6	4	.....
Bridgeport, Conn.....	29	10.5	7.3	7	0	97
Buffalo, N. Y.....	123	11.9	12.8	16	19	67
Cambridge, Mass.....	35	16.4	12.2	6	4	107
Camden, N. J. ²	29	12.2	12.8	5	5	83
Chicago, Ill. ²	615	11.1	10.6	81	86	73
Cincinnati, Ohio.....	111	14.2	15.1	8	12	53
Cleveland, Ohio. ²	158	9.3	9.5	26	25	71
Columbus, Ohio.....	70	14.0	12.3	5	8	52
Dallas, Tex.....	46	13.5	14.6	6	7	.....
Dayton, Ohio.....	41	12.9	9.0	4	2	66
Denver, Colo.....	47	9.0	20.3	7	12	.....
Des Moines, Iowa.....	33	12.2	.....	2	.....	.....
Detroit, Mich.....	194	10.2	10.3	42	51	84
Duluth, Minn.....	17	8.3	.....	1	.....	46
Erie, Pa.....	22	10.2	11.9	1	3	30
Fall River, Mass. ²	32	13.8	15.1	10	4	142
Flint, Mich.....	21	9.3	9.8	4	5	79
Fort Worth, Tex.....	24	8.7	7.7	2	3	.....
Grand Rapids, Mich.....	31	11.1	11.3	3	4	47
Houston, Tex.....	39	13.1	9.0	3	3	.....
Indianapolis, Ind.....	94	14.3	11.2	15	11	115
Jacksonville, Fla.....	37	19.3	12.3	2	5	.....
Jersey City, N. J.....	70	11.8	13.0	9	12	60
Kansas City, Kans.....	35	15.8	7.3	1	0	23
Los Angeles, Calif.....	237	18.5	13.7	23	8	86
Louisville, Ky.....	74	15.0	13.0	9	9	97
Lowell, Mass.....	29	13.1	14.1	5	4	87
Lynn, Mass.....	16	8.1	.....	2	.....	53
Memphis, Tenn.....	56	17.2	19.3	5	6	.....
Milwaukee, Wis.....	82	8.8	8.0	5	7	25
Minneapolis, Minn.....	90	11.5	10.8	8	12	43
Nashville, Tenn. ²	27	11.6	18.2	4	4	.....
New Bedford, Mass.....	25	10.0	9.8	3	6	47
New Haven, Conn.....	47	14.2	12.3	6	7	78
New Orleans, La.....	134	17.3	13.7	24	12	.....
New York, N. Y.....	1, 220	10.7	11.8	139	171	56
Bronx Borough.....	133	8.3	9.1	11	18	39
Brooklyn Borough.....	405	9.8	11.2	47	69	50
Manhattan Borough.....	561	12.9	13.7	70	67	68
Queens Borough.....	101	9.8	10.0	11	14	50
Richmond Borough.....	20	8.2	13.4	0	3	0
Newark, N. J.....	88	10.5	9.7	18	11	84
Norfolk, Va.....	30	9.8	10.4	4	2	71

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births—an annual rate based on deaths under 1 year for the week and estimated births for 1922. Cities left blank are not in the registration area for births.

³ Deaths for week ended Friday, Nov. 9, 1923.

Deaths from all causes in certain large cities of the United States during the week ended November 10, 1923, infant mortality, annual death rate, and comparison with corresponding week of 1922. (From the Weekly Health Index, November 15, 1923, issued by the Bureau of the Census, Department of Commerce)—Continued.

City.	Week ended Nov. 10, 1923.		Annual death rate per 1,000, corre- sponding week, 1922.	Deaths under 1 year.		Infant mortality rate, week ended Nov. 10, 1923.
	Total deaths.	Death rate.		Week ended Nov. 10, 1923.	Corre- sponding week, 1922.	
Oakland, Calif.	56	12.2	12.1	5	7	64
Omaha, Nebr.	53	13.5	13.0	4	7	43
Paterson, N. J.	35	13.1	8.7	4	3	64
Philadelphia, Pa.	504	13.7	14.0	66	68	86
Pittsburgh, Pa.	195	16.6	14.8	35	18	122
Portland, Oreg.	65	12.4	10.5	5	3	51
Providence, R. I.	64	13.8	14.7	9	10	73
Richmond, Va.	48	13.8	12.9	8	3	98
Rochester, N. Y.	60	9.8	11.5	8	8	63
St. Louis, Mo.	212	13.8	12.3	10	21	.....
St. Paul, Minn.	61	13.1	10.4	2	6	18
Salt Lake City, Utah ¹	32	13.2	12.2	5	7	81
San Antonio, Tex.	39	11.0	13.8	3	8	.....
San Francisco, Calif.	186	18.0	12.5	14	8	84
Seattle, Wash.	72	11.9	8.8	6	3	53
Spokane, Wash.	29	14.5	10.5	4	1	87
Springfield, Mass.	36	13.0	14.9	7	3	100
Syracuse, N. Y.	36	10.2	12.7	1	8	13
Toledo, Ohio.	68	13.2	9.2	7	6	71
Trenton, N. J.	34	13.9	24.2	2	7	34
Utica, N. Y.	29	14.6	.....	5	.....	106
Washington, D. C.	133	15.8	14.2	14	12	80
Wilmington, Del.	31	13.7	9.9	2	6	41
Worcester, Mass.	56	15.2	12.2	8	8	91
Yonkers, N. Y.	21	10.2	12.4	2	5	43

¹ Deaths for week ended Friday, Nov. 9, 1923.

PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

UNITED STATES.

CURRENT STATE SUMMARIES.

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers.

Reports for Week Ended November 17, 1923.

ALABAMA.		Cases.	CALIFORNIA—continued.		Cases.
Chicken pox.....		51	Diphtheria.....		283
Diphtheria.....		52	Influenza.....		27
Influenza.....		80	Leprosy—Los Angeles County.....		1
Malaria.....		77	Lethargic encephalitis—Los Angeles.....		2
Measles.....		131	Measles.....		238
Pellagra.....		1	Poliomyelitis:		
Pneumonia.....		70	Long Beach.....		2
Scarlet fever.....		19	Los Angeles.....		1
Smallpox.....		2	Monrovia.....		1
Tuberculosis.....		28	San Francisco.....		1
Typhoid fever.....		14	San Joaquin.....		1
Typhus fever.....		2	Selma.....		1
Whooping cough.....		19	Visalia.....		1
			Los Angeles County.....		1
			Tulare County.....		1
ARIZONA.			Scarlet fever.....		174
Chicken pox.....		2	Smallpox:		
Diphtheria.....		5	Los Angeles.....		43
Measles.....		6	Los Angeles County.....		40
Mumps.....		1	Scattering.....		2
Poliomyelitis.....		1	Typhoid fever.....		16
Scarlet fever.....		6	Typhus fever—Los Angeles.....		2
Tuberculosis.....		41			
ARKANSAS.			COLORADO.		
Chicken pox.....		3	(Exclusive of Denver.)		
Diphtheria.....		33	Chicken pox.....		2
Influenza.....		70	Diphtheria.....		25
Malaria.....		51	Measles.....		10
Measles.....		29	Mumps.....		26
Paratyphoid fever.....		1	Paratyphoid fever.....		1
Pellagra.....		7	Pneumonia.....		4
Scarlet fever.....		20	Scarlet fever.....		15
Smallpox.....		3	Tuberculosis.....		47
Trachoma.....		1	Typhoid fever.....		4
Tuberculosis.....		12	Vincent's angina.....		1
Typhoid fever.....		22			
Whooping cough.....		16	CONNECTICUT.		
CALIFORNIA.			Cerebrospinal meningitis.....		1
Anthrax—Colusa.....		1	Chicken pox.....		128
Cerebrospinal meningitis:			Diphtheria.....		63
Los Angeles.....		7	Influenza.....		5
Stockton.....		1	Measles.....		164

CONNECTICUT—continued.	Cases.
Mumps.....	25
Pneumonia.....	22
Poliomyelitis.....	2
Scarlet fever.....	76
Septic sore throat.....	3
Smallpox.....	1
Trachoma.....	1
Tuberculosis (all forms).....	34
Typhoid fever.....	1
Whooping cough.....	51

DELAWARE.

Chicken pox.....	1
Diphtheria.....	3
Influenza.....	2
Malaria.....	1
Measles.....	8
Pneumonia.....	2
Scarlet fever:	
Wilmington.....	8
Scattering.....	13
Tuberculosis.....	5
Typhoid fever.....	3
Whooping cough.....	4

FLORIDA.

Diphtheria.....	9
Influenza.....	4
Malaria.....	21
Pneumonia.....	7
Scarlet fever.....	1
Typhoid fever.....	4

GEORGIA.

Chicken pox.....	10
Conjunctivitis (infectious).....	1
Diphtheria.....	45
Hookworm disease.....	14
Influenza.....	17
Malaria.....	13
Measles.....	100
Mumps.....	5
Pneumonia.....	18
Scarlet fever.....	9
Septic sore throat.....	2
Smallpox.....	11
Tetanus.....	1
Tuberculosis (pulmonary).....	12
Typhoid fever.....	5
Typhus fever.....	3
Whooping cough.....	3

ILLINOIS.

Cerebrospinal meningitis—Cook County.....	1
Diphtheria:	
Cook County.....	184
Kane County.....	9
Lake County.....	9
Madison County.....	15
Scattering.....	98
Influenza.....	18
Lethargic encephalitis—Cook County.....	1
Measles.....	228
Pneumonia.....	223
Poliomyelitis:	
Cook County.....	1
Kankakee County.....	1

ILLINOIS—continued.	Cases.
Scarlet fever:	
Cook County.....	97
Lake County.....	11
Macou County.....	9
Scattering.....	113
Smallpox.....	5
Tuberculosis.....	198
Typhoid fever:	
Cook County.....	26
Scattering.....	22
Whooping cough.....	92

INDIANA.

Cerebrospinal meningitis—Martin County.....	1
Diphtheria.....	217
Influenza.....	7
Measles.....	148
Pneumonia.....	11
Scarlet fever.....	118
Smallpox.....	42
Tuberculosis.....	76
Typhoid fever.....	5

IOWA.

Diphtheria.....	62
Scarlet fever.....	57
Smallpox.....	21
Typhoid fever.....	2

KANSAS.

Cerebrospinal meningitis.....	1
Chicken pox.....	68
Diphtheria.....	94
German measles.....	1
Lethargic encephalitis.....	1
Measles.....	98
Mumps.....	86
Pneumonia.....	19
Poliomyelitis.....	3
Scarlet fever.....	88
Smallpox.....	26
Tetanus.....	1
Tuberculosis.....	25
Typhoid fever.....	14
Whooping cough.....	74

LOUISIANA.

Cerebrospinal meningitis.....	1
Diphtheria.....	43
Influenza.....	6
Measles.....	81
Pneumonia.....	26
Scarlet fever.....	16
Smallpox.....	2
Tuberculosis.....	21
Typhoid fever.....	18
Whooping cough.....	6

MAINE.

Chicken pox.....	66
Diphtheria.....	5
German measles.....	7
Measles.....	25
Mumps.....	28
Pneumonia.....	7
Scarlet fever.....	20

MAINE—continued.

	Cases.
Tuberculosis.....	5
Typhoid fever.....	4
Whooping cough.....	56

MARYLAND.¹

Chicken pox.....	65
Diphtheria.....	61
Dysentery.....	1
Influenza.....	31
Leprosy.....	1
Measles.....	25
Mumps.....	7
Ophthalmia neonatorum.....	1
Pneumonia (all forms).....	59
Polio-myelitis.....	1
Scarlet fever.....	62
Septic sore throat.....	4
Smallpox.....	2
Tuberculosis.....	48
Typhoid fever.....	29
Whooping cough.....	18

MASSACHUSETTS.

Cerebrospinal meningitis.....	3
Chicken pox.....	237
Conjunctivitis (suppurative).....	10
Diphtheria.....	286
Dysentery.....	1
German measles.....	7
Influenza.....	6
Lethargic encephalitis.....	1
Measles.....	233
Mumps.....	144
Ophthalmia neonatorum.....	22
Pneumonia (lobar).....	57
Polio-myelitis.....	9
Scarlet fever.....	232
Septic sore throat.....	5
Tuberculosis (all forms).....	105
Typhoid fever.....	13
Whooping cough.....	100

MICHIGAN.

Diphtheria.....	280
Measles.....	308
Pneumonia.....	93
Scarlet fever.....	325
Smallpox.....	89
Tuberculosis.....	50
Typhoid fever.....	36
Whooping cough.....	66

MINNESOTA.

Chicken pox.....	29
Diphtheria.....	119
Measles.....	124
Pneumonia.....	8
Polio-myelitis.....	1
Scarlet fever.....	265
Smallpox.....	30
Tuberculosis.....	41
Typhoid fever.....	8
Whooping cough.....	13

MISSISSIPPI.

Diphtheria.....	48
Scarlet fever.....	7
Smallpox.....	1
Typhoid fever.....	3

MISSOURI.

	Cases.
Cerebrospinal meningitis.....	18
Chicken pox.....	70
Diphtheria.....	179
Influenza.....	12
Measles.....	186
Mumps.....	12
Ophthalmia neonatorum.....	1
Pneumonia.....	38
Polio-myelitis.....	3
Scarlet fever.....	183
Septic sore throat.....	2
Smallpox.....	12
Tetanus.....	1
Trachoma.....	34
Tuberculosis.....	57
Typhoid fever.....	18
Whooping cough.....	110

MONTANA.

Diphtheria.....	5
Polio-myelitis:	
Flaxville.....	1
Lambert.....	1
Scarlet fever.....	24
Smallpox.....	45
Typhoid fever.....	1

NEBRASKA.

Chicken pox.....	26
Diphtheria.....	39
Measles.....	80
Mumps.....	23
Pneumonia.....	5
Polio-myelitis.....	5
Scarlet fever.....	47
Smallpox.....	6
Typhoid fever.....	1
Whooping cough.....	9

NEW JERSEY.

Cerebrospinal meningitis.....	2
Chicken pox.....	134
Diphtheria.....	139
Influenza.....	14
Measles.....	161
Paratyphoid fever.....	2
Pneumonia.....	83
Polio-myelitis.....	6
Scarlet fever.....	64
Trachoma.....	5
Typhoid fever.....	7
Whooping cough.....	59

NEW MEXICO.

Chicken pox.....	8
Diphtheria.....	20
Influenza.....	1
Malaria.....	1
Measles.....	14
Mumps.....	7
Pneumonia.....	2
Scarlet fever.....	12
Tuberculosis.....	16
Typhoid fever.....	5
Whooping cough.....	5

¹ Week ended Friday.

NEW YORK.		VERMONT.	
(Exclusive of New York City.)		Cases.	
Cerebrospinal meningitis.....	Cases. 3	Chicken pox.....	11
Diphtheria.....	299	Diphtheria.....	4
Influenza.....	19	Measles.....	42
Lethargic encephalitis.....	1	Mumps.....	7
Measles.....	665	Pneumonia.....	1
Pneumonia.....	153	Scarlet fever.....	11
Poliomyelitis.....	10	Smallpox.....	21
Scarlet fever.....	282	Typhoid fever.....	2
Smallpox.....	4	Whooping cough.....	26
Typhoid fever.....	24		
Whooping cough.....	224		
NORTH CAROLINA.		WASHINGTON.	
Chicken pox.....	138	Chicken pox.....	78
Diphtheria.....	204	Diphtheria.....	19
German measles.....	2	Measles:	
Measles.....	441	Seattle.....	47
Scarlet fever.....	85	Spokane.....	91
Septic sore throat.....	5	Yakima.....	17
Smallpox.....	36	Asotin County.....	11
Typhoid fever.....	9	Stevens County.....	23
Whooping cough.....	268	Scattering.....	36
OREGON.		Mumps.....	16
Chicken pox.....	27	Pneumonia.....	2
Diphtheria:		Scarlet fever:	
Portland.....	12	Spokane.....	14
Scattering.....	15	Scattering.....	30
Measles.....	224	Smallpox.....	24
Mumps.....	7	Tuberculosis.....	23
Pneumonia.....	19	Typhoid fever.....	14
Scarlet fever.....	27	Whooping cough.....	10
Smallpox.....	13		
Tuberculosis.....	5	WEST VIRGINIA.	
Typhoid fever.....	1	Diphtheria.....	25
SOUTH DAKOTA.		Scarlet fever.....	34
Chicken pox.....	24	Typhoid fever.....	10
Diphtheria.....	27		
Measles.....	47	WISCONSIN.	
Mumps.....	7	Milwaukee:	
Pneumonia.....	4	Cerebrospinal meningitis.....	1
Scarlet fever.....	22	Chicken pox.....	7
Whooping cough.....	6	Diphtheria.....	32
TEXAS.		Measles.....	3
Cerebrospinal meningitis.....	2	Pneumonia.....	2
Chicken pox.....	43	Scarlet fever.....	17
Dengue.....	52	Smallpox.....	3
Diphtheria.....	55	Tuberculosis.....	19
Dysentery.....	5	Whooping cough.....	31
Influenza.....	122	Scattering:	
Leprosy.....	1	Chicken pox.....	170
Measles.....	20	Diphtheria.....	141
Mumps.....	5	German measles.....	1
Paratyphoid fever.....	1	Influenza.....	23
Pellagra.....	3	Lethargic encephalitis.....	2
Pneumonia.....	20	Measles.....	225
Poliomyelitis.....	1	Pneumonia.....	6
Scarlet fever.....	28	Poliomyelitis.....	3
Smallpox.....	6	Scarlet fever.....	219
Trachoma.....	4	Smallpox.....	22
Tuberculosis.....	18	Tuberculosis.....	35
Typhoid fever.....	16	Typhoid fever.....	5
Whooping cough.....	12	Whooping cough.....	158
		WYOMING.	
		Chicken pox.....	10
		Diphtheria.....	1
		Influenza.....	1
		Measles.....	29
		Paratyphoid fever.....	1
		Scarlet fever.....	2
		Whooping cough.....	15

¹ Deaths.

Reports for Week Ended November 10, 1923.

DISTRICT OF COLUMBIA.		NORTH DAKOTA.	
	Cases.		Cases.
Cerebrospinal meningitis.....	1	Chicken pox.....	7
Chicken pox.....	37	Diphtheria.....	42
Diphtheria.....	22	German measles.....	1
Influenza.....	1	Measles.....	175
Lethargic encephalitis.....	1	Pneumonia.....	3
Measles.....	3	Poliomyelitis.....	2
Poliomyelitis.....	2	Scarlet fever.....	50
Scarlet fever.....	20	Smallpox.....	17
Smallpox.....	6	Trachoma.....	4
Tuberculosis.....	28	Tuberculosis.....	6
Typhoid fever.....	2	Typhoid fever.....	7
Whooping cough.....	7	Whooping cough.....	22

Reports for Week Ended November 3, 1923.

NORTH DAKOTA.			
	Cases.		Cases.
Chicken pox.....	22	Poliomyelitis.....	2
Diphtheria.....	40	Scarlet fever.....	46
Lethargic encephalitis.....	2	Typhoid fever.....	4
Measles.....	62	Whooping cough.....	2
Pneumonia.....	9		

SUMMARY OF CASES REPORTED MONTHLY BY STATES.

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State.	Cerebrospinal meningitis.	Diphtheria.	Influenza.	Malaria.	Measles.	Fellagra.	Poliomyelitis.	Scarlet fever.	Smallpox.	Typhoid fever.
<i>August, 1923.</i>										
Wyoming.....	1	1	.....	.....	41	.....	1	7	.....	9
<i>September, 1923.</i>										
Wyoming.....	5	.....	.....	.....	23	.....	.....	10	.....	14
<i>October, 1923.</i>										
Alabama.....	.....	322	88	1,095	292	24	2	145	8	165
District of Columbia.....	.....	74	1	.....	9	.....	10	68	4	14
Florida.....	2	96	14	165	176	3	3	11	.....	37
Indiana.....	4	456	18	.....	91	.....	4	236	61	84
Louisiana.....	2	155	55	155	208	9	2	27	11	65
Massachusetts.....	13	1,067	15	2	660	.....	48	677	.....	89
Michigan.....	.....	1,002	.....	.....	736	.....	7	969	184	156
New York.....	18	1,462	87	17	1,675	.....	197	905	2	281

**Cases of Certain Communicable Diseases Reported for the Month of September,
1923, by State Health Officers.**

State.	Number of cases reported.								
	Chicken pox.	Diph- theria.	Measles.	Mumps.	Scarlet fever.	Small- pox.	Tuber- culosis.	Ty- phoid fever.	Whoop- ing cough.
Alabama.....	26	259	272	4	78	5	108	265	132
Arizona.....	2	9	10	1	20		114	10	.....
Arkansas.....	43	39	76	111	27	17	52	138	145
California.....	126	634	830	24	238	38	650	93	166
Colorado.....	30	193	59	48	62		232	103	39
Connecticut.....	16	115	28	20	91	2	134	59	171
Delaware.....	5	9	5		17		15	17	1
Dist. of Columbia.....	5	26	7		26	19	98	20	32
Florida.....		48	79	1	1		75	36	25
Georgia ¹									
Idaho.....		33	23		16	9	9	22	7
Illinois.....	159	607	125	128	444	9	1,096	320	490
Indiana.....		269	96		166	59	143	137	.....
Iowa.....	9	170	5	3	125	13		(²)	9
Kansas.....	53	199	111	24	248	27	79	146	142
Kentucky ¹									
Louisiana.....		81	21		10	26	109	89	19
Maine.....	32	33	128	4	53		42	27	162
Maryland.....	24	129	85	14	112	7	193	226	196
Massachusetts.....	137	612	165	108	312		553	98	341
Michigan.....	46	600	222	24	539	78	353	160	280
Minnesota.....	85	460	337		738	34	263	67	80
Mississippi.....	175	348	250	70	73	7	219	241	736
Missouri ¹									
Montana.....	35	35	153	3	31	32	32	34	25
Nebraska.....	25	66	35	5	111	3		4	47
Nevada ²									
New Hampshire ²									
New Jersey.....	59	348	88		108	1	403	100	169
New Mexico.....		67	22	3	17		72	75	16
New York.....	234	788	627	165	527	7	1,544	409	975
North Carolina.....	44	817	510		288	52		206	921
North Dakota.....	6	37	57		49	5	17	31	30
Ohio.....	160	823	99	28	744	40	463	353	493
Oklahoma.....		33	5		45	6		48	.....
Oregon.....	18	57	46	4	60	20	23	34	17
Pennsylvania.....	223	1,132	459	104	722		454	448	997
Rhode Island.....	3	43	20	1	25		43		6
South Carolina.....		231	33	10	15	8	4	27	35
South Dakota.....	11	58	46		123	38	18	13	23
Tennessee ²									
Texas ¹									
Utah ²									
Vermont ¹									
Virginia.....	73	499	462		214	15	130	264	578
Washington.....	28	84	52	12	136	20	111	96	59
West Virginia.....	30	273	88		265	2	44	270	257
Wisconsin.....	88	238	140	5	285	31	158	36	393
Wyoming.....	7	5	23	2	10		2	14	11

¹ Reports received weekly.² Reports received annually.³ Not notifiable.⁴ Report not received at time of going to press.

Reported Cases per 1,000 Population (Annual Basis) for the Month of September, 1923.

State.	Case rates per 1,000 population.								
	Chicken pox.	Diph- theria.	Measles.	Mumps.	Scarlet fever.	Small- pox.	Tuber- culosis.	Ty- phoid fever.	Whoop- ing cough.
Alabama.....	0.13	1.30	1.37	0.02	0.39	0.06	0.54	1.33	0.06
Arizona.....	.06	.29	.32	.03	.64		3.64	.32	
Arkansas.....	.29	.26	.51	.74	.18	.11	.35	.92	.97
California.....	.40	2.03	2.65	.08	.76	.12	2.08	.30	.53
Colorado.....	.37	2.37	.72	.59	.76		2.85	1.27	.48
Connecticut.....	.13	.95	.23	.16	.75	.02	1.10	.49	1.41
Delaware.....	.26	.48	.26		.90		.79	.90	.05
District of Columbia.....	.14	.72	.19		.72	.53	2.72	.56	.89
Florida.....		.56	.92	.01	.01		.87	.42	.29
Georgia ¹.....		.85	.60		.41	.23	.23	.57	.18
Idaho.....		1.09	.22	.23	.80	.02	1.56	.57	.88
Illinois.....	.28	1.09	.39		.67	.24	.58	.55	
Indiana.....	.04	.84	.02	.01	.62	.06		(²)	.04
Iowa.....	.36	1.35	.75	.16	1.08	.18	.53	.99	.96
Kansas.....									
Kentucky ¹.....		.53	.14		.07	.17	.72	.59	.12
Louisiana.....	.50	.52	2.00	.06	.83		.66	.42	2.54
Maine.....	.19	1.04	.69	.11	.91	.06	1.56	1.83	1.58
Maryland.....	.41	1.85	.50	.33	.94		1.67	.30	1.03
Massachusetts.....	.14	1.84	.68	.07	1.65	.24	1.08	.49	.86
Michigan.....	.41	2.24	1.64		3.59	.17	1.28	.33	.39
Minnesota.....	1.19	2.36	1.70	.48	.50	.05	1.49	1.64	5.00
Mississippi.....									
Missouri ¹.....	.70	.70	3.05	.06	.62	.64	.64	.68	.50
Montana.....	.23	.60	.32	.05	1.01	.03		.04	.43
Nebraska.....									
Nevada ¹									
New Hampshire ¹									
New Jersey.....	.21	1.25	.32		.39	.00	1.45	.36	.61
New Mexico.....		2.19	.72	.10	.56		2.35	2.45	.52
New York.....	.26	.88	.70	.19	.59	.01	1.73	.46	1.09
North Carolina.....	.20	3.70	2.31		1.30	.24		.93	4.17
North Dakota.....	.11	.67	1.03		.89	.09	.31	.56	.54
Ohio.....	.32	1.64	.20	.06	1.48	.08	.92	.70	.98
Oklahoma.....		.19	.03		.25	.03		.27	
Oregon.....	.27	.84	.68	.06	.89	.30	.34	.59	.25
Pennsylvania.....	.30	1.51	.61	.14	.97		.61	.60	1.33
Rhode Island.....	.06	.83	.39	.02	.49		.83		.12
South Carolina.....		1.61	.23	.07	.10	.06	.03	.19	.24
South Dakota.....	.20	1.08	.85		2.28	.71	.33	.24	.43
Tennessee ¹									
Texas ¹									
Utah ¹									
Vermont ¹									
Virginia.....	.37	2.53	2.34		1.09	.08	.66	1.34	2.93
Washington.....	.24	.71	.44	.10	1.15	.17	.94	.81	.50
West Virginia.....	.24	2.14	.69		2.08	.02	.35	2.12	2.02
Wisconsin.....	.39	1.06	.62	.02	1.27	.14	.70	.16	1.75
Wyoming.....	.40	.29	1.32	.11	.57		.11	.80	.63

¹ Reports received weekly.² Reports received annually.³ Not notifiable.⁴ Report not received at time of going to press.

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923.

ANTHRAX.

City.	Cases.	Deaths.
Pennsylvania:		
Philadelphia.....		1

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

CEREBROSPINAL MENINGITIS.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for previous years.	Week ended Nov. 3, 1923.		City.	Median for previous years.	Week ended Nov. 3, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Missouri:			
Long Beach.....	0		1	Kansas City.....	0	1	
Passadena.....	0	1		New York:			
Sacramento.....	0	2		New York.....	3	1	
San Diego.....	0	1	1	Troy.....	0	1	
San Francisco.....	0	1	1	Ohio:			
Connecticut:				Cincinnati.....	0		1
Waterbury.....	0	1	1	Cleveland.....	0	1	1
Georgia:				Pennsylvania:			
Savannah.....	0		1	Philadelphia.....	0	1	1
Illinois:				Rhode Island:			
Chicago.....	3	2	1	Providence.....	0	1	
Maryland:				West Virginia:			
Baltimore.....	0	1	1	Charleston.....	0	1	1
Massachusetts:							
Lowell.....	0	1					

DIPHTHERIA.

See p. 2796; also Current State summaries, p. 2783; and Monthly summaries by States, p. 2787.

INFLUENZA.

City.	Cases.		Deaths, week ended Nov. 3, 1923.	City.	Cases.		Deaths, week ended Nov. 3, 1923.
	Week ended Nov. 4, 1922.	Week ended Nov. 3, 1923.			Week ended Nov. 4, 1922.	Week ended Nov. 3, 1923.	
Alabama:				Massachusetts—Contd.			
Dothan.....	5			Saugus.....	5		
Mobile.....			1	Springfield.....		1	1
Montgomery.....			1	Michigan:			
California:				Detroit.....	2	2	
Los Angeles.....	7	6	1	Flint.....		2	
Oakland.....	2	3	1	Highland Park.....	2		
San Francisco.....	3	1	2	Minnesota:			
Santa Ana.....	3			Mankato.....	1		
Stockton.....		1		Missouri:			
Connecticut:				Kansas City.....	1	2	2
Meriden.....	2			New Jersey:			
New Britain.....	4			Hackensack.....	1		
New Haven.....		1		Hoboken.....	1		
New London.....	1			Kearny.....	1		
Waterbury.....		2	2	Newark.....	12	1	
District of Columbia:				Passaic.....			1
Washington.....	2	1	1	Paterson.....		2	
Georgia:				Trenton.....	3	1	
Atlanta.....	1			New York:			
Augusta.....		1		Amsterdam.....		1	
Savannah.....		1		Jamestown.....	1		
Illinois:				New York.....	41	18	2
Alton.....		1	1	Schenectady.....		1	1
Chicago.....	10	6	1	Ohio:			
Danville.....	1			Cleveland.....		1	1
Kentucky:				East Cleveland.....			1
Louisville.....	3	1		Toledo.....			1
Louisiana:				Pennsylvania:			
Baton Rouge.....	1			Philadelphia.....	2	1	2
New Orleans.....	6	1	1	Pittsburgh.....			1
Maine:				South Carolina:			
Bangor.....	1			Charleston.....			1
Maryland:				Tennessee:			
Baltimore.....	4	6	2	Memphis.....			1
Massachusetts:				Texas:			
Boston.....	5			Dallas.....		1	
Fall River.....	1	1		Houston.....			1
Quincy.....	3			Waco.....			1

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

LEPROSY.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
California:			Louisiana:		
San Francisco.....		1	New Orleans.....	1	1

MALARIA.

Alabama:			Georgia—Continued.		
Birmingham.....	3		Brunswick.....	3	
Mobile.....		1	Savannah.....	3	
Tuscaloosa.....	1		Louisiana:		
Arkansas:			New Orleans.....	5	
Little Rock.....	6		Michigan:		
California:			Detroit.....	7	
Los Angeles.....	1		Pennsylvania:		
San Francisco.....	1		Philadelphia.....	2	
Florida:			Tennessee:		
Tampa.....	1		Memphis.....	8	1
Georgia:			Texas:		
Atlanta.....	1	2	Houston.....		1
Augusta.....	7				

MEASLES.

See p. 2796; also Current State summaries, p. 2783, and Monthly summaries by States, p. 2787.

PELLAGRA.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			Texas:		
Tuscaloosa.....	7		Dallas.....		1
Georgia:			Houston.....		1
Atlanta.....		1	San Antonio.....		1
South Carolina:			Waco.....		1
Columbia.....		2			

PNEUMONIA (ALL FORMS).

Alabama:			Illinois—Continued.		
Anniston.....	4		Danville.....		1
Birmingham.....		4	East St. Louis.....		3
Dothan.....	1		Elgin.....		1
Mobile.....		1	Evanston.....	1	
California:			Freeport.....		1
Long Beach.....		3	Galesburg.....		2
Los Angeles.....	23	8	Jacksonville.....	1	
Oakland.....		2	La Salle.....		2
Pasadena.....		2	Peoria.....		1
Sacramento.....		5	Rockford.....	2	1
San Diego.....	4	3	Springfield.....	6	4
San Francisco.....	11	3	Urbana.....	1	
Santa Ana.....		2	Indiana:		
Colorado:			East Chicago.....		4
Denver.....		8	Gary.....		1
Pueblo.....		2	Hammond.....		1
Connecticut:			Indianapolis.....		6
Bridgeport.....	4	2	La Fayette.....		1
Bristol.....		1	Mishawaka.....		1
Fairfield.....	1		Muncie.....		2
Hartford.....		2	Terre Haute.....		6
New Haven.....		2	Iowa:		
Waterbury.....		2	Muscatine.....	1	
District of Columbia:			Sioux City.....	1	
Washington.....		10	Kansas:		
Georgia:			Coffeyville.....	1	
Atlanta.....	11	10	Fort Scott.....	1	
Brunswick.....		1	Kansas City.....	3	
Rome.....	1		Topeka.....		1
Savannah.....		3	Kentucky:		
Illinois:			Lexington.....		1
Alton.....	1		Louisville.....	14	11
Aurora.....	2		Louisiana:		
Champaign.....	2		New Orleans.....	11	9
Chicago.....	120	33			

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

PNEUMONIA (ALL FORMS)—Continued.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Maine:			New York:		
Auburn.....		2	Albany.....	8	
Biddeford.....		2	Auburn.....		1
Lewiston.....		1	Buffalo.....	12	8
Portland.....		1	Cohoes.....		1
Waterville.....	1		Elmira.....	3	
Maryland:			Hornell.....	1	
Baltimore.....	37	24	Hudson.....		1
Cumberland.....		1	Ithaca.....	2	1
Massachusetts:			Lackawanna.....	1	
Amesbury.....		1	Little Falls.....		1
Boston.....	31	23	New York.....	189	102
Brookline.....		1	Peekskill.....		2
Brookline.....	1		Poughkeepsie.....	1	
Cambridge.....		1	Rochester.....	22	5
Chelsea.....	2		Syracuse.....	12	2
Danvers.....	1		Troy.....	8	3
Framingham.....		1	Yonkers.....		1
Haverhill.....	1		North Carolina:		
Holyoke.....		2	Greensboro.....		1
Lowell.....		2	Winston-Salem.....		2
Malden.....	1		Ohio:		
New Bedford.....		1	Akron.....	4	
Newburyport.....	1		Bucyrus.....	1	
Newton.....		1	Canton.....		1
Quincy.....		2	Cincinnati.....		7
Somerville.....	4	1	Cleveland.....	21	20
Springfield.....	3	2	Cleveland Heights.....	2	
Taunton.....		2	Columbus.....		5
Watertown.....		1	Dayton.....	2	
Webster.....	1		East Youngstown.....		1
Winthrop.....	1		Lancaster.....		3
Worcester.....		9	Lorain.....	2	
Michigan:			Middletown.....		1
Battle Creek.....	1		Tiffin.....		3
Benton Harbor.....		1	Toledo.....		4
Detroit.....	38	25	Youngstown.....		6
Flint.....	4	1	Oklahoma:		
Grand Rapids.....	4	2	Oklahoma.....		6
Hamtramck.....	1		Oregon:		
Highland Park.....	2		Portland.....		9
Jackson.....		1	Pennsylvania:		
Kalamazoo.....		3	Philadelphia.....	74	47
Marquette.....	3		Pittsburgh.....		37
Muskegon.....		1	Rhode Island:		
Pontiac.....	2		Pawtucket.....		2
Port Huron.....	1		Providence.....		3
Saginaw.....		1	South Carolina:		
Minnesota:			Charleston.....		3
Duluth.....		1	Columbia.....		1
Faribault.....		1	Greenville.....		3
Hibbing.....	1		South Dakota:		
Minneapolis.....		2	Sioux Falls.....		1
St. Paul.....		7	Tennessee:		
Missouri:			Memphis.....		5
Kansas City.....	14	9	Nashville.....		5
St. Joseph.....		3	Texas:		
Montana:			Dallas.....	5	4
Billings.....		1	Fort Worth.....		1
Missoula.....	2	1	Galveston.....		1
Nebraska:			Houston.....		3
Lincoln.....		1	San Antonio.....		6
Omaha.....		2	Utah:		
New Hampshire:			Salt Lake City.....		3
Nashua.....		1	Virginia:		
New Jersey:			Lynchburg.....		1
Atlantic City.....		1	Norfolk.....		2
Bloomfield.....	3		Petersburg.....		2
Camden.....	3	1	Portsmouth.....		4
East Orange.....	2		Richmond.....		2
Elizabeth.....		4	Roanoke.....	5	
Harrison.....	1		West Virginia:		
Hoboken.....		5	Charleston.....		1
Jersey City.....	1		Huntington.....		2
Montclair.....	3		Wheeling.....	1	
Morristown.....		1	Wisconsin:		
Newark.....	38	5	Ashland.....		1
Orange.....	2		Beloit.....		1
Passaic.....		2	Kenosha.....		1
Paterson.....	2		Milwaukee.....		4
Phillipsburg.....		1	Racine.....		1
Trenton.....	2				
West Hoboken.....		1			

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

POLIOMYELITIS (INFANTILE PARALYSIS).

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Nov. 3, 1923.		City.	Median for pre- vious years.	Week ended Nov. 3, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Arkansas:				Massachusetts—Contd.			
North Little Rock.....		1		Haverhill.....	0	1	
California:				Lowell.....	0	2	1
Los Angeles.....	0	2		Pittsfield.....	0	1	
Pasadena.....	0	1		Wakefield.....	0	1	
San Francisco.....	0	1	1	Minnesota:			
Connecticut:				Rochester.....	0	1	
Hartford.....	0	2		Nebraska:			
New Haven.....	0	1		Omaha.....	0	1	
Waterbury.....	0	1		New Jersey:			
District of Columbia:				Hackensack.....	0	1	
Washington.....	0	1		Newark.....	0	0	
Illinois:				Trenton.....	0	1	
Chicago.....	3	4		New York:			
Danville.....	0	1		Amsterdam.....		1	
Urbana.....		1		Buffalo.....	0	1	
Indiana:				Ithaca.....	0	1	1
Terre Haute.....	0	1		New York.....	7	13	
Maine:				Ohio:			
Portland.....	0	1		Columbus.....	0	1	
Massachusetts:				Pennsylvania:			
Boston.....	1	8		Philadelphia.....	0	1	
Chelsea.....	0	1		Rhode Island:			
Everett.....	0	1		Providence.....	0	1	

RABIES IN ANIMALS.

City.	Cases.	City.	Cases.
California:		New Jersey:	
Los Angeles.....	6	East Orange.....	1
Missouri:		Tennessee:	
Kansas City.....	2	Memphis.....	1

SCARLET FEVER.

See p. 2796; also Current State summaries, p. 2783, and Monthly summaries by States, p. 2787.

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

SMALLPOX.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Nov. 3, 1923.		City.	Median for pre- vious years.	Week ended Nov. 3, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
California:				Missouri:			
Long Beach.....	0	2		St. Louis.....	0	2	
Los Angeles.....	1	31		North Carolina:			
Riverside.....	0	1		Greensboro.....	0	1	
San Bernardino.....	0	1		Ohio:			
District of Columbia:				Toledo.....	0	1	
Washington.....	0	1		Youngstown.....	0	4	
Georgia:				Zanesville.....	0	17	
Atlanta.....	0	9		Oregon:			
Illinois:				Portland.....	2	1	
Chicago.....	1	1		Pennsylvania:			
Indiana:				Philadelphia.....	0	6	
Fort Wayne.....	0	1		York.....	0	1	
Gary.....	0	1		Tennessee:			
Indianapolis.....	1	1		Chattanooga.....	0	3	
Kokomo.....	0	1		Knoxville.....	0	2	
Michigan City.....		1		Washington:			
Muncie.....	0	1		Seattle.....	0	2	
Iowa:				Tacoma.....	0	2	
Clinton.....	0	6		Wisconsin:			
Michigan:				Milwaukee.....	5	3	
Detroit.....	2	9		Racine.....	0	1	
Highland Park.....	0	13		Superior.....	0	1	
Holland.....	0	4					
Jackson.....	0	12					
Minnesota:							
Duluth.....	0	2					
Minneapolis.....	3	1					
St. Paul.....	3	7					

TETANUS.

City.	Cases.	Deaths.	City.	Cases.	Deaths.
Alabama:			New Jersey:		
Mobile.....		1	Atlantic City.....	1	1
Illinois:			New York:		
Chicago.....	1		New York.....		1
Indiana:			Poughkeepsie.....	1	1
Terre Haute.....	1		Ohio:		
Massachusetts:			Bucyrus.....		1
Boston.....		1	Pennsylvania:		
Cambridge.....	1		Philadelphia.....	2	2
Newburyport.....		1	Tennessee:		
Missouri:			Nashville.....		1
St. Louis.....	1	1			

TUBERCULOSIS.

See p. 2796; also Current State summaries, p. 2783.

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

TYPHOID FEVER.

The column headed "Median for previous years" gives the median number of cases reported during the corresponding week of the years 1915 to 1922, inclusive. In instances in which data for the full eight years are incomplete, the median is that for the number of years for which information is available.

City.	Median for pre- vious years.	Week ended Nov. 3, 1923.		City.	Median for pre- vious years.	Week ended Nov. 3, 1923.	
		Cases.	Deaths.			Cases.	Deaths.
Arkansas:				New York:			
Little Rock.....	1	6	.....	Albany.....	2	1	.....
California:				Buffalo.....	1	1	.....
Los Angeles.....	5	3	.....	Elmira.....	0	1	.....
Oakland.....	0	1	.....	New York.....	26	16	2
Sacramento.....	1	2	1	Peekskill.....	0	1	.....
Colorado:				Schenectady.....	0	1	.....
Pueblo.....	1	1	.....	North Carolina:			
Connecticut:				Durham.....	0	3	1
New Haven.....	1	1	.....	Winston-Salem.....	0	.....	1
District of Columbia:				Ohio:			
Washington.....	3	5	1	Chillicothe.....	0	1	.....
Georgia:				Cincinnati.....	0	2	.....
Atlanta.....	0	1	.....	Cleveland.....	4	1	.....
La Grange.....	0	1	.....	Hamilton.....	0	2	.....
Macon.....	0	4	.....	Lorain.....	0	1	.....
Savannah.....	1	1	1	Mansfield.....	0	.....	1
Illinois:				New Philadelphia.....	0	2	.....
Chicago.....	9	11	2	Newark.....	0	1	.....
Freeport.....	0	1	.....	Sandusky.....	0	2	.....
Jacksonville.....	0	1	.....	Youngstown.....	2	1	1
Mattoon.....	1	1	.....	Oregon:			
Peoria.....	0	2	.....	Portland.....	0	1	.....
Indiana:				Pennsylvania:			
Muncie.....	0	1	.....	Berwick.....	0	1	.....
Kentucky:				Hazleton.....	0	1	.....
Louisville.....	2	1	1	Jeannette.....	0	1	.....
Louisiana:				Norristown.....	0	1	.....
New Orleans.....	3	5	.....	Philadelphia.....	9	6	4
Maine:				Pittsburgh.....	1	2	.....
Sanford.....	0	1	.....	Reading.....	1	1	.....
Maryland:				Rhode Island:			
Baltimore.....	9	4	2	Cranston.....	0	1	.....
Cumberland.....	1	1	.....	South Carolina:			
Massachusetts:				Greenville.....	0	1	.....
Boston.....	2	2	.....	South Dakota:			
Clinton.....	0	1	.....	Sioux Falls.....	0	1	.....
Fall River.....	1	2	.....	Tennessee:			
Holyoke.....	0	1	.....	Knoxville.....	0	2	.....
Lynn.....	0	2	.....	Memphis.....	2	1	2
Malden.....	0	1	.....	Nashville.....	3	3	1
Medford.....	0	1	.....	Texas:			
New Bedford.....	1	1	1	El Paso.....	2	2	.....
Springfield.....	0	1	.....	Fort Worth.....	0	1	.....
Taunton.....	0	5	.....	Galveston.....	0	.....	1
Wakefield.....	0	2	.....	Waco.....	0	.....	1
Michigan:				Virginia:			
Benton Harbor.....	0	.....	1	Charlottesville.....	0	1	.....
Detroit.....	8	7	1	Lynchburg.....	0	1	.....
Kalamazoo.....	0	3	1	Roanoke.....	0	3	1
Minnesota:				Washington:			
Duluth.....	0	1	.....	Everett.....	0	2	.....
St. Paul.....	1	1	1	Seattle.....	0	1	.....
Missouri:				West Virginia:			
Joplin.....	0	1	.....	Fairmont.....	0	2	.....
St. Joseph.....	0	1	.....	Huntington.....	0	1	1
St. Louis.....	8	.....	1	Martinsburg.....	0	1	.....
New Hampshire:				Wheeling.....	0	7	.....
Berlin.....	0	1	.....	Wisconsin:			
New Jersey:				Green Bay.....	0	1	.....
Camden.....	0	.....	1	Marinette.....	0	1	.....
Elizabeth.....	0	2	.....	Milwaukee.....	1	1	.....
Hoboken.....	0	1	.....	Superior.....	0	1	.....
Newark.....	3	1	1				

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

TYPHUS FEVER.

City.	Cases.	Deaths.
New York:		
New York.....	1	.....

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Alabama:										
Anniston.....	17,734	7	.....	.....	.....	.....	2	.....	2	.....
Birmingham.....	178,806	51	5	.....	1	.....	4	.....	2	6
Dothan.....	10,034	2	1	.....	10	.....	.....	.....	.....	.....
Mobile.....	60,777	19	2	1	.....	.....	.....	.....	.....	1
Montgomery.....	43,464	10	2	.....	.....	.....	7	.....	.....	1
Tuscaloosa.....	11,996	.....	1	.....	.....	.....	.....	.....	.....	.....
Arkansas:										
Fort Smith.....	28,870	.....	3	.....	.....	.....	2	.....	.....	.....
Little Rock.....	65,142	.....	1	.....	.....	.....	.....	.....	5	.....
North Little Rock.....	14,048	.....	1	.....	.....	.....	1	.....	.....	.....
California:										
Alameda.....	28,806	.....	1	.....	.....	.....	1	.....	.....	.....
Bakersfield.....	18,638	7	8	.....	.....	.....	2	.....	.....	1
Glendale.....	13,536	10	.....	1	.....	.....	.....	.....	.....	1
Long Beach.....	55,593	21	4	.....	.....	.....	1	.....	.....	.....
Los Angeles.....	576,673	206	60	1	3	.....	36	1	58	19
Oakland.....	216,261	50	14	.....	5	.....	18	.....	1	2
Pasadena.....	45,354	22	1	.....	1	.....	3	.....	2	1
Richmond.....	16,843	2	.....	.....	4	.....	.....	.....	.....	.....
Riverside.....	19,341	4	1	.....	5	.....	.....	.....	.....	.....
Sacramento.....	65,908	18	4	.....	2	.....	.....	.....	4	.....
San Bernardino.....	18,721	15	2	.....	.....	.....	5	.....	2	.....
San Diego.....	74,683	32	6	.....	2	.....	1	.....	4	1
San Francisco.....	506,676	145	25	.....	109	.....	14	.....	21	12
Santa Ana.....	15,485	8	.....	.....	1	.....	1	.....	.....	.....
Santa Cruz.....	10,917	4	.....	.....	.....	.....	.....	.....	.....	.....
Stockton.....	40,296	0	6	.....	1	.....	11	.....	2	.....
Vallejo.....	21,107	2	.....	.....	.....	.....	1	.....	.....	.....
Colorado:										
Denver.....	256,491	67	33	1	1	1	12	.....	.....	8
Pueblo.....	43,050	11	5	2	2	.....	7	.....	3	1
Trinidad.....	10,906	.....	.....	.....	.....	.....	1	.....	.....	.....
Connecticut:										
Bridgeport.....	143,555	20	6	1	.....	.....	7	.....	1	.....
Bristol.....	20,620	8	1	.....	.....	.....	2	.....	.....	1
Fairfield (town).....	11,475	0	.....	.....	.....	.....	5	.....	.....	.....
Greenwich (town).....	22,123	.....	.....	.....	17	.....	.....	.....	1	.....
Hartford.....	138,036	10	10	.....	.....	.....	1	.....	4	.....
Manchester (town).....	18,370	2	.....	.....	.....	.....	1	.....	.....	.....
Milford (town).....	10,193	1	1	.....	.....	.....	.....	.....	.....	.....
New Haven.....	162,537	39	1	.....	.....	.....	12	.....	7	.....
New London.....	25,688	3	.....	.....	.....	.....	.....	.....	.....	.....
Waterbury.....	91,715	22	10	.....	1	.....	15	1	2	.....
District of Columbia:										
Washington.....	437,571	128	20	3	10	.....	21	1	32	9
Florida:										
St. Petersburg.....	14,237	1	.....	.....	.....	.....	.....	.....	.....	.....
Tampa.....	51,608	15	2	.....	.....	.....	.....	.....	.....	3
Georgia:										
Albany.....	11,555	.....	2	.....	.....	.....	.....	.....	.....	.....
Atlanta.....	200,616	70	14	4	12	.....	7	.....	5	5
Augusta.....	52,548	16	2	.....	.....	.....	.....	.....	.....	6
Brunswick.....	14,413	4	.....	.....	.....	.....	.....	.....	.....	1
Lagrange.....	17,038	.....	1	.....	.....	.....	1	.....	.....	.....
Macon.....	52,995	2	2	.....	.....	.....	.....	.....	4	.....
Rome.....	13,252	.....	1	.....	3	.....	.....	.....	.....	.....
Savannah.....	83,252	25	.....	.....	1	.....	2	.....	4	.....
Idaho:										
Pocatello.....	15,001	1	.....	.....	.....	.....	.....	.....	.....	.....
Illinois:										
Alton.....	24,682	5	4	.....	.....	.....	.....	.....	.....	.....
Aurora.....	36,397	13	12	1	.....	.....	.....	.....	3	.....

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Illinois—Continued.										
Bloomington.....	28,725	5			1		3		6	
Champaign.....	15,873		2				1			
Chicago.....	2,701,705	573	141	9	27		62		231	53
Danville.....	33,776	11	2				1			
East St. Louis.....	66,767	21	4			1				2
Elgin.....	27,454	7	1	1			4			1
Evanston.....	37,234		4				4		1	
Freeport.....	19,669	11								
Galesburg.....	23,834	11								
Jacksonville.....	15,713	5								
Kewanee.....	16,026	0			1		1			
La Salle.....	13,050	4					1			
Mattoon.....	13,552		2							
Pekin.....	12,086						1			
Peoria.....	76,121	18	6				3			1
Rock Island.....	35,177	4			2				2	
Rockford.....	65,651	17	1							2
Springfield.....	59,183	28	3				4		1	
Urbana.....	10,244		3							
Indiana:										
Anderson.....	29,767	1	2				2			
Bloomington.....	11,595	1					2			
Crawfordsville.....	10,139	2	4				1			
East Chicago.....	35,967	18	3				1			
Elwood.....	10,790	6			25					1
Fort Wayne.....	86,549	14	10	1			5			
Frankfort.....	11,585	3			1					
Gary.....	55,378	8	3	1			6			
Hammond.....	36,004	6	4				2			
Huntington.....	14,000	3								
Indianapolis.....	314,194	67	15	2	2		5		5	8
Kokomo.....	30,067	5	6				1		1	
La Fayette.....	22,496	7								
Logansport.....	21,626	6	2	1						
Michigan City.....	19,457	5								
Mishawaka.....	15,195	2					3		1	
Muncie.....	36,524	7			1		1			
Newcastle.....	14,458	1	1							
South Bend.....	70,983	7	8	1			11			
Terre Haute.....	66,083	22	4				8			1
Iowa:										
Burlington.....	24,057	7					1			
Cedar Rapids.....	45,566		1				11			
Clinton.....	24,151		8							
Davenport.....	56,727		10	1	19		1			
Dubuque.....	39,141	1	1							
Muscatine.....	16,068	3					2			
Ottumwa.....	23,003		5	1			1			
Sioux City.....	71,227	1	9	1	85		6			
Waterloo.....	36,230						2			
Kansas:										
Atchison.....	12,630				62		1			
Coffeyville.....	13,452	2							1	
Fort Scott.....	10,693	2								
Hutchinson.....	23,298		1							
Kansas City.....	101,177		5				6		8	
Lawrence.....	12,456	5								1
Parsons.....	16,028		2				1			
Topeka.....	50,022	17	5				3		1	1
Wichita.....	72,217	24	3							1
Kentucky:										
Covington.....	57,121	13	2				10		2	1
Henderson.....	12,169	5	1				4			1
Lexington.....	41,634	11	3				1			1
Louisville.....	234,891	71	9		3		4		13	8
Owensboro.....	17,424		1						1	
Louisiana:										
New Orleans.....	387,219	155	11	1	5		5		16	11
Maine:										
Auburn.....	16,965	8								
Bangor.....	25,973		1							
Bath.....	14,731	0								
Biddeford.....	18,008	8			1					

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.		
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	
Maine—Continued.											
Lewiston.....	31,791	11	3		4		1		1	1	
Portland.....	69,272	12	1								
Sanford (town).....	10,691	4					1				
Waterville.....	13,351		2		1						
Maryland:											
Baltimore.....	733,826	197	20	1	7		14		35	15	
Cumberland.....	29,837	7					1			1	
Frederick.....	11,066	1	5								
Massachusetts:											
Adams (town).....	12,967	1									
Amesbury (town).....	10,036	5									
Arlington (town).....	18,665	3							1	1	
Attleboro.....	19,731	8								1	
Belmont (town).....	10,749	2			1						
Beverly.....	22,561	7	1				2				
Boston.....	748,060	204	68	6	32		53		42	14	
Braintree (town).....	10,580	1	3								
Brockton.....	66,254	14	5				1			1	
Brookline.....	37,748	5			8		3				
Cambridge.....	109,694	23	5	1	3		8		3	2	
Chelsea.....	43,184	12	1				1			1	
Chicopee.....	36,214	4	1				1		1		
Clinton.....	12,979	1			1						
Danvers.....	11,108				4				2		
Dedham.....	10,792	2									
Easthampton.....	11,261				1						
Everett.....	40,120	6	1				1				
Fall River.....	120,485	24	10				1			3	
Framingham.....	17,033	3									
Gardner.....	16,971	2									
Greenfield.....	15,462	7									
Haverhill.....	53,884	12	5		3		3		3	3	
Holyoke.....	60,203	15	4	1					3	1	
Lawrence.....	94,270	24	32	1	1		3		2	2	
Leominster.....	19,744	6			1		2		3		
Lowell.....	112,759	27	2				3		1	3	
Lynn.....	99,148	19	6		4		7		2	2	
Malden.....	49,103	13	3	1			4		2	1	
Medford.....	39,038	8	1				2				
Melrose.....	18,204	2	1								
Methuen.....	15,189	4	6		1						
New Bedford.....	121,217	20					1		4	2	
Newburyport.....	15,618	7									
Newton.....	46,054	8					3		2		
North Adams.....	22,282	2	1								
Northampton.....	21,951	3					1		1	1	
Peabody.....	19,552	6	11				2			1	
Pittsfield.....	41,763	6	3		19				2	1	
Plymouth.....	13,045	3									
Quincy.....	47,876	10	7		2		1		1		
Revere.....	28,823	5		1							
Salem.....	42,529	11	4	2	13		2		3		
Somerville.....	93,091	16	6				4		6		
Southbridge.....	14,245	2	1		7						
Springfield.....	129,614	36	2	1	2		4		4		
Taunton.....	37,137	12	1				1		1	1	
Wakefield.....	13,025	2					1				
Waltham.....	30,915	5	5		1		2				
Watertown.....	21,457	6	1		9		2		1		
Webster.....	13,258		3				1				
West Springfield.....	13,443	1	6	1			1		1		
Westfield.....	18,604	4							1	1	
Winchester.....	10,485	4					2				
Winthrop.....	15,455	4					1				
Woburn.....	16,574	3									
Worcester.....	179,754	48	14	1	3		10		4		
Michigan:											
Ann Arbor.....	19,516	8							1		
Battle Creek.....	36,164	0	5				5		1		
Benton Harbor.....	12,233	11					2			1	
Detroit.....	993,678	247	68	4	19		83	3	29	25	
Flint.....	91,599	16	21		9		6		4		
Grand Rapids.....	137,634	35	16				8		5	2	

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Michigan—Continued.										
Hamtramck.....	48,615	5	4				3			
Highland Park.....	46,499	4	1	1	1		7			
Holland.....	12,183				1					
Ironwood.....	15,739	1	1				3			1
Jackson.....	48,374	13	2		1				2	
Kalamazoo.....	48,487	20	3				6		3	1
Marquette.....	12,718	1			119					
Muskegon.....	36,570	13	5				6			1
Pontiac.....	34,273	8	3	1			9			
Port Huron.....	25,944	6								
Saginaw.....	61,903	14	9		7		4		3	1
Sault Ste. Marie.....	12,086	4	4		11		1			
Minnesota:										
Duluth.....	98,917	12	4				12		2	
Faribault.....	11,089	7		1	25		2			
Hibbing.....	15,069	3					1			
Minneapolis.....	380,582	79	33	1	2		66	1	16	4
Rochester.....	13,722	24			2					1
St. Cloud.....	15,873		7							
St. Paul.....	234,698	57	18		1		21	1	5	1
Virginia.....	14,022		5				4			
Winona.....	19,143	1								
Missouri:										
Cape Girardeau.....	10,252	2	1				1			
Joplin.....	29,902		2				17			
Kansas City.....	324,410	97	18	1	4		9		8	5
St. Joseph.....	77,939	33	3		2		9			2
St. Louis.....	772,897	193	33	1	4	1	47	1	36	10
Montana:										
Anaconda.....	11,668	5			12		1			
Billings.....	15,100	5			10		1			
Great Falls.....	24,121	9	4	1						
Helena.....	12,037	2								
Missoula.....	12,668	8								
Nebraska:										
Lincoln.....	54,948	7	10	1	3		4			
Omaha.....	191,601	34	18		1		4			1
Nevada:										
Reno.....	12,016	2								
New Hampshire:										
Berlin.....	16,104	5	2							
Concord.....	22,167	4			9		1			
Dover.....	13,029	3								
Keene.....	11,210	3			12		1			2
Nashua.....	28,379	6	1		4				1	
New Jersey:										
Asbury Park.....	12,400	1								
Atlantic City.....	50,707	12								
Bayonne.....	76,754		5				5		2	
Bloomfield.....	22,019	2					1			1
Camden.....	116,309	30	18	2					3	2
Clifton.....	26,470	2					1		1	
East Orange.....	50,710	3	1		1		3		1	
Elizabeth.....	95,783		18		3			1	1	1
Englewood.....	11,627	3								
Garfield.....	19,381	3							1	
Hackensack.....	17,667	3					2		2	1
Harrison.....	15,721		1				1			
Hoboken.....	68,166	15							1	
Jersey City.....	298,103		8		8		6		15	
Kearny.....	26,724	6	1		1		1			2
Long Branch.....	13,521	1							1	
Montclair.....	28,810	0							1	
Morristown.....	12,548	7							1	1
Newark.....	414,524	81	12	1			2		13	6
Orange.....	33,268	6					1			
Passaic.....	63,841	26	3		1		6		3	2
Paterson.....	135,875		2		14		2		2	
Perth Amboy.....	41,707	4	1						1	
Phillipsburg.....	16,923	5								
Plainfield.....	27,700	3	1		19					
Summit.....	10,174	1							1	
Trenton.....	119,289	39	9		1				2	5

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
New Jersey—Continued.										
West Hoboken.....	40,074	4								
West New York.....	29,926	0	1						1	
West Orange.....	15,573	1	1							
New Mexico:										
Albuquerque.....	15,157	12					1			8
New York:										
Albany.....	113,344		24				15		9	
Amsterdam.....	33,524	11	31		5		9			1
Auburn.....	36,192	9								1
Buffalo.....	506,775	127	23	1	1		22		12	7
Cohoes.....	22,987	2			10					
Dunkirk.....	19,336	2	7		7					
Elmira.....	45,393	12					3			
Geneva.....	14,648	7								1
Hornell.....	15,025	2								
Hudson.....	11,745	2	1							
Ithaca.....	17,004	6	1		4				1	
Lackawanna.....	17,913	2	5				4		1	
Little Falls.....	13,029	3								
Lockport.....	21,308	7			33		5			1
Middletown.....	18,420				7				1	1
Mount Vernon.....	42,726	14							2	
New York.....	5,620,048	1,136	149	9	119	3	52		170	82
Newburgh.....	30,366	9			1		1			2
North Tonawanda.....	15,482	2	3				7			
Olean.....	20,506	7					1			
Peekskill.....	15,868	3	2				1			1
Plattsburg.....	10,909	8								
Poughkeepsie.....	35,000	4					1		3	1
Rochester.....	295,750	76	6						13	3
Rome.....	26,841	6			24		5			1
Saratoga Springs.....	13,181	2	1				1			1
Schenectady.....	88,723	15	18	1	25		3		5	
Syracuse.....	171,717	56	7		16		12		8	3
Troy.....	72,013	26	3		30		3		3	
Yonkers.....	100,176	12	3		3		3			1
North Carolina:										
Durham.....	21,719	6	3				2			1
Greensboro.....	43,525	9	2		3		7			
Rocky Mount.....	12,742	7								
Salisbury.....	13,884	1								
Wilmington.....	33,372	7	4				4		1	3
Winston-Salem.....	48,395	18	9		23		3		4	2
North Dakota:										
Fargo.....	21,961	6								1
Grand Forks.....	14,010						9			
Ohio:										
Akron.....	208,435	36	10				9			
Ashtabula.....	22,082	2					1			
Bellaire.....	15,061	4					6			
Bucyrus.....	10,425	6	1							
Canton.....	87,091	13	22		1		6			
Chillicothe.....	15,831	4	1				1			
Cincinnati.....	401,247	113	16	1	9		24	1	7	4
Cleveland.....	796,841	158	39	2	7		23		17	8
Cleveland Heights.....	15,236						1		1	
Columbus.....	237,031	67	13	2			7		8	4
Dayton.....	152,559	34	17		1		9		1	
East Cleveland.....	27,292	3					2		2	
East Youngstown.....	11,237	3								
Findlay.....	17,021	1								
Hamilton.....	39,675	7	1	1			1		1	
Kenmore.....	12,683						1			
Lancaster.....	14,706	6	1							
Lima.....	41,326	12	4		7		1			
Lorain.....	37,285		8				18			
Mansfield.....	27,824	10	2				1			1
Martins Ferry.....	11,634	2					3			
Middletown.....	23,594	5	2				1		1	
New Philadelphia.....	10,718		1		4		1			
Newark.....	26,718	3								
Niles.....	13,089	1					1			

¹ Pulmonary only.

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Popula- tion Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Ohio—Continued.										
Norwood.....	24,986	2								1
Piqua.....	15,044	3	1							
Salem.....	10,305	4								
Sandusky.....	22,897	5	1				22			1
Springfield.....	60,840	10	1		1		2			
Tiffin.....	14,375	6								
Toledo.....	243,164	57	27	1	1		15	1	3	5
Youngstown.....	132,358		27	1			16	1	1	1
Zanesville.....	29,569	10					6		1	1
Oklahoma:										
Oklahoma.....	91,295	36	5		1		2			
Oregon:										
Portland.....	258,288	61	14	2	148		6		8	1
Pennsylvania:										
Allentown.....	73,502		4							
Altoona.....	60,331						4			
Ambridge.....	12,730		3		1		14			
Beaver Falls.....	12,902		7						1	
Bethlehem.....	50,358		6				3		1	
Braddock.....	20,879		5				1		1	
Butler.....	23,778		2				4			
Carnegie.....	11,516						2			
Chambersburg.....	13,171						3			
Chester.....	58,030				1		1			
Coatesville.....	14,515		1				1			
Connellsville.....	13,804		3				6			
Dubois.....	13,681						1			
Duquesne.....	19,011						1			
Easton.....	33,813		1				1			
Erie.....	93,372		13		7		14		3	
Farrell.....	15,586		18				2			
Greensburg.....	15,033		4							
Harrisburg.....	75,917				4		4			
Homestead.....	20,452		1				2			
Jeannette.....	10,627		6							
Johnstown.....	67,327		15				8			
Lancaster.....	53,150		3				7			
McKees Rocks.....	16,713		1				2			
McKeesport.....	46,781		2							
Monessen.....	18,179		2							
New Castle.....	44,938		2				1			
New Kensington.....	11,967		3				1			
Norristown.....	32,319		1						2	
North Braddock.....	14,928		1				2			
Oil City.....	21,274		2				4		2	
Olyphant.....	10,236		6							
Philadelphia.....	1,823,779	504	83	5	10		44		64	23
Phoenixville.....	10,494				1					
Pittsburgh.....	588,343	179	48	4	3		43	4	18	8
Reading.....	107,784		5		1		3		2	
Scranton.....	137,783		6				3		4	
Shamokin.....	21,204		2							
Sharon.....	21,747		4				3			
Steelton.....	13,428		2							
Sunbury.....	15,721		3				2			
Tamaqua.....	12,363		1							
Uniontown.....	15,692		2							
Warren.....	14,272						3		1	
Washington.....	21,490		6		12		5			
West Chester.....	11,717						1			
Wilkes-Barre.....	73,833		9		3		3			
Wilkinsburg.....	24,403		5				3		1	
Williamsport.....	36,198		1		111		3			
Woodlawn.....	12,495						2			
York.....	47,512		3				4			
Rhode Island:										
Cranston.....	29,407	7	1							2
Cumberland (town).....	10,077	2	1							
East Providence (town).....	21,793		1							
Newport.....	30,255	4	3	1						
Pawtucket.....	64,248	20	1							1
Providence.....	237,595	62	9	1	1		9			3

CITY REPORTS FOR WEEK ENDED NOVEMBER 3, 1923—Continued.

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

City.	Population Jan. 1, 1920.	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
South Carolina:										
Charleston.....	67,957	22	7				3	1		3
Columbia.....	37,524	31	2		4		3			3
Greenville.....	23,127	24	1				1			3
South Dakota:										
Sioux Falls.....	25,202	13	2		1					
Tennessee:										
Chattanooga.....	57,895		4				3			
Knoxville.....	77,818		4	2	6		8		2	2
Memphis.....	162,351	52	11		1		4		10	5
Nashville.....	118,342	43	4				2		4	6
Texas:										
Amarillo.....	15,494						3			
Beaumont.....	40,422		2				1			1
Corpus Christi.....	10,522	2								
Dallas.....	158,976	34	9		70		2		1	
El Paso.....	77,560	27	4				2		8	7
Fort Worth.....	106,482	29	5		1		2		1	2
Galveston.....	44,255	17	1				3			1
Houston.....	138,276	30	3				5			1
San Antonio.....	161,379	53	1							8
Waco.....	38,500	11					1			
Utah:										
Salt Lake City.....	181,110	44	10		2		2			2
Virginia:										
Alexandria.....	18,060	0	1							
Charlottesville.....	10,688						2			
Danville.....	21,539	6	2				3		1	
Lynchburg.....	30,070	9	4				2			
Norfolk.....	115,777	9	9		1			1	4	4
Petersburg.....	31,012	9	4	1					1	
Portsmouth.....	54,387	14					3			
Richmond.....	171,667	50	12	1	1		5		3	3
Roanoke.....	50,842	16	8				5		1	1
Washington:										
Bellingham.....	25,585		1		1					
Seattle.....	315,312		4		22		14		11	
Tacoma.....	96,965		3		3		6			
Vancouver.....	12,637		1		2					
Yakima.....	18,539				25					
West Virginia:										
Bluefield.....	15,282	5	2		1					
Charleston.....	39,608	14	7				4			
Clarksburg.....	27,869	5								
Fairmont.....	17,851		1							
Huntington.....	50,177	20	1				2	1	4	
Morgantown.....	12,127		1				3		1	
Parkersburg.....	20,050	3					1			
Wheeling.....	56,208	9	2	1	1		8			1
Wisconsin:										
Appleton.....	19,561	8								
Ashland.....	11,334	6					1			2
Beloit.....	21,284	7	4				2			
Eau Claire.....	20,906		1				2			
Fond du Lac.....	23,427	5	1				3			
Green Bay.....	31,017		5		15		8			
Janesville.....	18,293		2						1	
Kenosha.....	40,472	1	2		5		4		2	
La Crosse.....	30,421				1		2			
Madison.....	38,378	3	8		1					
Manitowoc.....	17,563		1						1	
Marinette.....	13,610						1			
Milwaukee.....	457,147	68	31		5		21		8	3
Oshkosh.....	33,162	2	4				1			
Racine.....	58,598	11	3		1		34			
Sheboygan.....	30,955	2	8				4			
Stevens Point.....	11,371						7			
Superior.....	39,671	6	4		1		1			1
Wausau.....	18,681		10				3		1	
West Allis.....	13,745		1				1			

FOREIGN AND INSULAR.

CANADA.

Communicable Diseases—Ontario—October, 1923 (Comparative).

Communicable diseases have been reported in the Province of Ontario, Canada, as follows:

Disease.	October, 1923.		October, 1922.	
	Cases.	Deaths.	Cases.	Deaths.
Cerebrospinal meningitis.....			4	4
Chancroid.....	4		2	
Chicken pox.....	196			
Diphtheria.....	286	13	395	40
Gonorrhea.....	242		179	
Influenza.....	22	9		
Lethargic encephalitis.....	3	3		
Measles.....	208		166	
Mumps.....	40			
Pneumonia.....		90		129
Polio-myelitis (infantile paralysis).....		33		2
Scarlet fever.....	517	8	369	5
Smallpox.....	23			21
Syphilis.....	130		229	
Tuberculosis.....	187	90	175	112
Typhoid fever.....	137	16	111	32
Whooping cough.....	185	7	149	11

Other Diseases.

During the month of October, 1923, six cases of dysentery, with two deaths, one case of German measles, and four cases of septic sore throat were reported in the Province of Ontario, Canada.

CUBA.

Communicable Diseases.

Communicable diseases have been reported in Cuba as follows:

Habana.

Disease.	Oct. 21-31, 1923.		Remain- ing under treat- ment Oct. 31, 1923.
	New cases.	Deaths.	
Diphtheria.....	5	1	3
Leprosy.....			15
Malaria.....	59	4	162
Measles.....	2		1
Paratyphoid fever.....			1
Polio-myelitis (infantile paralysis).....	1		
Scarlet fever.....	6		7
Typhoid fever.....	11	3	26

Population, 390,693.

¹ From the interior, 25; from abroad, 1.

² From the interior, 16.

Provinces.

Province.	Sept. 11-20, 1923.						
	Chicken pox.	Diph- theria.	Malaria.	Measles.	Paraty- phoid fever.	Scarlet fever.	Typhoid fever.
Camaguey.....			28				12
Habana.....		7	50		4	1	33
Matanzas.....		1			2		7
Oriente.....		1	41				12
Pinar del Rio.....		1	4		2		9
Santa Clara.....		2	5		8		19
Total.....		12	128		16	1	92

Sept. 21-30, 1923.

Camaguey.....			23		1		8
Habana.....	1	9	29	2	1		38
Matanzas.....					4		5
Oriente.....		3	36		1		5
Pinar del Rio.....		2	3				8
Santa Clara.....		2	1		8		11
Total.....	1	16	92	2	15		75

GUADELOUPE (WEST INDIES).**Smallpox (Reported as Alastrim).**

Under date of October 24, 1923, smallpox (reported as alastrim) was reported present in epidemic form in the Island of Guadeloupe, West Indies. The disease was stated to be present in 18 localities having a total population of 108,000. At the town of Basse Terre, 1,000 cases were reported present during the week ended October 20, 1923.¹

ITALY.**Quarantine Against Melilla, Morocco.²**

Information dated October 22, 1923, shows that arrivals at Italian ports from Melilla, Morocco, have been made subject to quarantine restrictions against plague.

LATVIA.**Communicable Diseases—August, 1923.**

Communicable diseases were reported in the Republic of Latvia during the month of August, 1923, as follows:

Disease.	Cases.	Remarks.
Chicken pox.....	1	
Diphtheria.....	48	
Malaria.....	2	
Measles.....	11	
Scarlet fever.....	92	
Smallpox.....	1	
Typhoid fever.....	116	
Typhus fever.....	19	Paratyphus fever: Cases, 11.
Whooping cough.....	38	

¹ Public Health Reports, Nov. 2, 1923, p. 2561, and previous issues.² Public Health Reports, Oct. 26, 1923, p. 2500, and Nov. 9, 1923, p. 2698.

Dysentery—Leprosy—August, 1923.

During the same period 26 cases of dysentery and 5 cases of leprosy were reported in the Republic of Latvia.

MOROCCO.**Plague—Melilla—Spanish Zone.¹**

Information dated October 23, 1923, shows the occurrence of two new cases of plague in the district of Melilla, Spanish Zone, Morocco. The cases occurred at the camp of Dar-Quebdani.

SWITZERLAND.**Poliomyelitis (Infantile Paralysis)—Lucerne.**

From May 1 to October 15, 1923, 29 cases of poliomyelitis (infantile paralysis), with 5 deaths, were reported at Lucerne, Switzerland. Of these, six cases with two deaths occurred in adults. Four cases terminated in permanent disability.

UNION OF SOUTH AFRICA.**Epidemic Cerebrospinal Meningitis—Witwatersrand.²**

During the week ended September 29, 1923, 42 cases of epidemic cerebrospinal meningitis were reported in the Witwatersrand Area, Union of South Africa. Of these, 34 cases were in natives, 3 in the mixed colored population, and 5 cases in the white population.

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

The reports contained in the following tables must not be considered as complete or final as regards either the list of countries included or the figures for the particular countries for which reports are given.

Reports Received During Week Ended November 23, 1923.³**CHOLERA.**

Place.	Date.	Cases.	Deaths.	Remarks.
India.....		.....	.....	Sept. 2-8, 1923: Cases, 1,981;
Madras.....	Sept. 30-Oct. 6....	1	2	deaths, 1,116.
Rangoon.....	Sept. 23-29.....	1	1	

PLAGUE.

Bolivia:				
La Paz.....	Sept. 1-30.....	.....	1	
China:				
Hongkong.....	Sept. 9-22.....	2	4	
India.....				Sept. 2-8, 1923: Cases, 4,343;
Madras Presidency.....	Sept. 30-Oct. 6....	265	163	deaths, 2,828.
Rangoon.....	Sept. 23-29.....	10	8	
Morocco:				
Melilla (District).....	Oct. 9.....	2	.....	Occurring in camp at Dar-Quebdani, Spanish Zone.
Palestine:				
Haifa.....	Sept. 25-Oct. 1....	1	.....

¹ Public Health Reports, Oct. 26, 1923, p. 2500.

² Public Health Reports, Nov. 2, 1923, p. 2654, and subsequent issues.

³ From medical officers of the Public Health Service, American consuls, and other sources.

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

Reports Received During Week Ended November 23, 1923—Continued.

SMALLPOX.

Place.	Date.	Cases.	Deaths.	Remarks.
Bolivia: La Paz.....	Aug. 1-Sept. 30....	5	6	
Brazil: Rio de Janeiro.....	Sept. 30-Oct. 20....	5		
Canada: Manitoba— Winnipeg.....	Oct. 21-27.....	1		
Ontario.....				Oct. 1-31, 1923: Cases, 23.
China: Foochow.....	Sept. 23-Oct. 6....			Present.
Hongkong.....	Sept. 9-15.....	11	10	
Manchuria— Harbin.....	Sept. 24-30.....	5		
Colombia: Barranquilla.....	Oct. 15-21.....		1	
Guadeloupe (West Indies). Basse Terre.....	Oct. 14-20.....			Oct. 24, 1923: Epidemic. 1,000 cases present.
India: Madras.....	Sept. 30-Oct. 6....	3	1	Sept. 2-8, 1923: Cases, 926; deaths, 195.
Rangoon.....	Sept. 23-29.....	4		
Java: East Java— Soerabaya.....	Sept. 2-15.....	64	6	
Latvia.....				Aug. 1-31, 1923: 1 case.
Portugal: Oporto.....	Oct. 14-27.....	17	13	
Spain: Barcelona.....	Oct. 11-17.....		1	
Valencia.....	Oct. 14-20.....	7	2	
Syria: Damascus.....	Sept. 25-Oct. 2....	7		
Union of South Africa: Cape Province.....	Sept. 16-29.....			Outbreaks.

TYPHUS FEVER.

Bolivia: La Paz.....	Aug. 1-Sept. 30....	10	2	
Bulgaria: Sofia.....	Sept. 23-29.....			Paratyphus fever, cases, 2.
China: Antung.....	Sept. 25-Oct. 1....	1		
Latvia.....				Aug. 1-31, 1923: Cases, 19. Para-
Palestine: Jaffa.....	do.....	2		typhus: Cases, 11.
Union of South Africa: Cape Province.....	Sept. 16-22.....			Outbreaks.
Orange Free State.....	Sept. 23-29.....			Do.

Reports Received from June 30 to November 16, 1923.¹

CHOLERA.

Place.	Date.	Cases.	Deaths.	Remarks.
Ceylon: Colombo.....	Sept. 16-22.....		2	
China: Canton.....	Aug. 26-Sept. 1....	1		
Foochow.....	July 29-Sept. 1....			Present.
Shanghai.....	Aug. 20-Sept. 2....	2	28	Cases, foreign: deaths, native.
Do.....	Aug. 28-Sept. 16....		12	Reported moderately prevalent Aug. 28.
India: Bombay.....	June 3-30.....	34	23	Apr. 15-June 30, 1923: Cases, 19,470; deaths, 14,608. July 1-
Do.....	July 1-Sept. 15....	129	75	Sept. 1, 1923; Cases, 16,630;
Calcutta.....	May 6-June 30....	371	300	deaths, 9,411.
Do.....	July 8-Sept. 29....	212	165	
Madras.....	June 3-30.....	2		
Do.....	July 1-Sept. 29....	18	8	
Rangoon.....	May 13-June 30....	18	15	
Do.....	July 1-Aug. 25....	34	31	

¹ From medical officers of the Public Health Service, American consuls, and other sources.

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

Reports Received from June 30 to November 16, 1923—Continued.

CHOLERA—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China.....				Oct. 1-31, 1923: Cases, 92; deaths, 53. Preceding month: Cases, 24; deaths, 14. October, 1921: Cases, 100; deaths, 61. Nov. 1-Dec. 31, 1922: Cases, 161; deaths, 59 (native); European, 1 case.
City—				
Saigon.....	May 20-June 30...	12	11	Including 100 square kilometers of surrounding country.
Do.....	July 1-28.....	13	12	Do.
Province—				
Annam.....	Sept. 1-Dec. 31....	179	66	
Do.....	Feb. 1-28.....			Epidemic.
Cambodge.....	Sept. 1-Dec. 31....	47	27	
Cochin-China.....	do.....	51	33	
Do.....	Jan. 1-Feb. 28....	19	8	
Tonkin.....	Oct. 1-Dec. 31....	1		
Iraq (Mesopotamia):				
Bagdad.....	Sept. 3-17.....	46	37	
Basrah.....	Aug. 8-Sept. 17...	564	422	Port declared infected since Aug. 6, 1923.
Philippine Islands:				
City—				
Manila.....	June 10-16.....	2	1	Death in foreign case from Ching-kang, China.
Province—				
Bulacan.....	May 17-23.....	1		
Capiz.....	May 27-June 2....	1	1	
Cebu.....	Apr. 8-21.....	1	1	
Cotobato.....	Apr. 8-14.....	1	1	
Laguna.....	May 6-June 9....	2	1	
Mindoro.....	Aug. 5-11.....	2	2	
Mountain.....	Mar. 25-31.....	1	1	
Occidental Negros.....	July 22-28.....	1	1	
Pangasinan.....	June 24-30.....	2	2	
Viscaya.....	July 7-14.....	1	1	
Russia (Soviet).....				Jan. 1-May 15, 1923: Cases, 10.
Siam:				
Bangkok.....	May 13-June 30...	10	11	
Do.....	July 1-Sept. 15...	6	3	

PLAGUE

Algeria:				
Algiers.....	Aug. 11-20.....	2	1	Actual dates of occurrence, Aug. 16 and 17, 1923.
St. Eugène.....	Aug. 1-20.....	2	2	Locality 5 miles north of Algiers.
Australia:				
Sydney.....	June 30.....	1	1	
Azores:				
St. Michael Island.....	May 6-26.....	12	5	In one locality.
Brazil:				
Bahia.....	Sept. 2-15.....	3	2	
Porto Alegre.....				Jan. 1-Mar. 31, 1923; Deaths, 19.
British East Africa:				
Kenya—				
Kisumu.....	June 10-16.....	2	1	
Do.....	Aug. 5-11.....		1	
Mombasa.....	Aug. 19-Sept. 15...	17	8	Plague rats, 6.
Kilindini Area.....				Plague rats, 12.
Tanganyika.....	May 6-June 2....	3	3	Territory.
Do.....	July 5-21.....	20	12	
Uganda.....	Apr. 1-30.....	7	5	
Canary Islands:				
Las Palmas.....	June 7.....	1		
Teneriffe.....	Nov. 6.....			Present.
Ceylon:				
Colombo.....	May 6-June 30...	18	19	Plague rats, 38.
Do.....	July 1-Sept. 29...	65	57	Plague rats, 26. One plague-infected cat.
China:				
Amoy.....	May 13-June 25...		10	
Do.....	July 1-Sept. 29...		18	
Foochow.....	May 27-June 23...			Present.
Do.....	July 8-Sept. 1....			Reported as endemic.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**Reports Received from June 30 to November 16, 1923—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
China—Continued.				
Hongkong.....	Apr. 29-June 30....	63	40	
Do.....	July 1-Sept. 1.....	30	32	
Manchuria—				
Yakoshih.....	May 31.....	1	1	Station on Eastern Chinese Railway. Occurring in tarabagan (marmot) hunter. Bubonic. Rodent plague present.
Nanking.....	June 17-30.....			
Do.....	July 1-Aug. 4.....			Do.
Ecuador:				
Guamote.....	Aug. 1-15.....	9	2	Country district.
Guayaquil.....				May 16-June 30, 1923: Rats examined, 13,800; found infected, 39. July 1-Aug. 15, 1923: Rats examined, 13,450; found infected, 23. Aug. 16-30, 1923: Rats taken, 54,304; found infected, 66. (Number examined not reported.)
Do.....	July 1-Sept. 30.....	10	3	
Santa Ana (Manabi).....	July 16-Aug. 15.....	7	3	
Egypt.....				Jan. 1-June 21, 1923: Cases, 1,051; deaths, 548. May 1-29: Cases, 345. Jan. 1-June 24, 1923: Cases, 1,069. Jan. 1-Oct. 4, 1923: Cases, 1,360; deaths, 661.
City—				
Alexandria.....	Jan. 7-June 24.....	35	15	May 1-29, 1923: Cases, 14.
Do.....	July 1-Sept. 30.....	17	3	
Port Said.....	Jan. 7-June 24.....	24	12	May 1-29, 1923: Cases, 13.
Do.....	July 1-Sept. 30.....	30	5	
Suez.....	Mar. 2-June 15.....	12	7	May 1-29, 1923: Cases, 3.
Do.....	July 16-Aug. 30.....	11	1	
Province—				
Assiout.....	May 1-29.....	64		Deaths not reported.
Benisouef.....	do.....	7		Do.
Fayoum.....	do.....	14		Do.
Garbieh.....	do.....	2		Do.
Geizeh.....	do.....	3		Do.
Girzeh.....	do.....	123		Sept. 26: One case.
Keneh.....	do.....	22		Deaths not reported.
Menoufieh.....	do.....	34		Sept. 15: Cases, 1; deaths, 1.
Minieh.....	do.....	46		Deaths not reported.
France:				
Paris.....	Aug. 13.....	1		Published in Public Health Reports, Sept. 14, 1923, pp. 21 and 2190.
Greece:				
Syra Island.....	Sept. 10.....			Present.
Hawaii:				
Hamakua.....				Plague-infected rats: Pohakea, May 23, 1923, 1 rat; vicinity of Pacific Sugar Co. mill, June 2, 1 rat; Aug. 2, 1 rat at Hamakua Mill Co. plantation. Aug. 16, plague rat found at Kapulena.
Honokaa.....	Sept. 21.....	1	1	July 20, 1923: One plague rat; July 30, 2 plague rats; Honokaa Sugar Co. mill and Honokaa village.
India.....				Apr. 29-June 23, 1923: Cases, 5,783; deaths, 4,481. July 1-Sept. 1, 1923: Cases, 8,798; deaths, 5,701.
Bombay.....	Apr. 29-June 20.....	503	411	
Do.....	July 1-Sept. 22.....	39	31	
Calcutta.....	May 6-June 9.....	13	13	
Do.....	Aug. 12-Sept. 15.....	2	2	
Karachi.....	May 13-June 30.....	110	85	Plague rats, 5.
Do.....	July 1-Oct. 6.....	118	103	
Madras Presidency.....	May 13-June 30.....	254	141	
Do.....	July 1-Sept. 29.....	3,125	1,890	
Rangoon.....	May 6-June 30.....	260	229	
Do.....	July 1-Sept. 29.....	309	271	
Indo-China.....				Oct. 1-Dec. 31, 1922: Cases, 245; deaths, 237. Sept. 1-30, 1922: 70 cases, 68 deaths.
City—				
Saigon.....	June 24-30.....	5	5	Including 100 square kilometers of surrounding country.
Do.....	July 1-7.....	1	1	Do.

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

Reports Received from June 30 to November 16, 1923—Continued.

PLAGUE—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Indo-China—Continued.				
Province—				
Annam.....	Oct. 1-Dec. 31.....	40	36	Preceding month, 15 deaths.
Do.....	Jan. 1-Feb. 28.....	47	39	
Cambodge.....	Oct. 1-Dec. 31.....	145	145	Preceding month, 51 deaths.
Do.....	Jan. 1-Feb. 28.....	152	152	
Cochin China.....	Oct. 1-Dec. 31.....	4	1	Preceding month, 4 cases, 2 deaths.
Do.....	Jan. 1-Feb. 28.....	3	3	
Iraq (Mesopotamia):				
Bagdad.....	May 1-June 30.....	335	224	
Basrah.....	Aug. 8-Sept. 4.....	4	2	
Java.....				
Province—				May 1-June 30, 1923: Deaths, 912. July 1-Aug. 31, 1923: Deaths, 976.
Djakakarta.....	June 1-30.....		5	
Do.....	July 1-Aug. 31.....		4	
Kedoe.....	June 1-30.....		135	
Do.....	July 1-Aug. 31.....		231	
Pekalongan.....	June 1-30.....		48	
Do.....	July 1-Aug. 31.....		105	
Samarang.....	June 1-30.....		143	
Do.....	July 1-Aug. 31.....		260	
Soerabaya.....	June 1-30.....		1	
Do.....	Aug. 1-31.....		2	
Soerakarta.....	do.....		109	May 16, 1923: Epidemic in 5 districts.
Do.....	July 1-Aug. 31.....		374	
Madagascar.....				
Tananarive Province.....	Apr. 1-June 30.....	60	57	Apr. 1-June 30, 1923: Cases, 84; deaths, 81. July 1-Aug. 15, 1923: Cases, 11; deaths, 9.
Do.....	July 1-Aug. 15.....	5	4	
Tananarive town.....	Apr. 1-June 30.....	24	24	
Do.....	July 1-Aug. 15.....	6	5	
Mauritius Island.....				
Port Louis.....	May 4.....	1		May 4-21, 1923: 2 cases.
Mexico:				
Tampico.....				Apr. 15-21, 1923: 1 plague rat. Aug. 8, 1923: At Dona Cecelia, a suburb of Tampico, 1 plague-infected rat found. From Jan. 1 to Aug. 8, 1923, plague-infected rats found, 5.
Morocco:				
Larache (El Araish).....	Nov. 2.....			In Spanish zone. Present.
Melilla.....				Aug. 31-Sept. 6, 1923: Cases, 4. In garrison of Dar-Quebdani.
Palestine:				
Haifa.....	Sept. 18-24.....	1		
Jaffa.....	June 19-July 16.....	10	1	Bubonic and septicemic.
Peru.....				
Locality—				May 1-June 30, 1923: Cases, 111; deaths, 68. July 1-Sept. 30, 1923: Cases, 43; deaths, 24.
Ayabaca.....	May 16-June 30.....	15	13	
Do.....	July 1-31.....	4	2	
Callao.....	May 1-June 30.....	5	3	
Do.....	July 1-Sept. 30.....	4	2	
Canete.....	May 16-June 30.....	3	2	
Do.....	July 1-Sept. 30.....	7	4	
Cerro Azul.....	May 1-31.....	3	1	
Chiclayo.....	May 1-June 30.....	9	2	
Do.....	July 1-Aug. 31.....	6	4	
Cutervo.....	May 1-15.....	2	1	
Guadalupe.....	Sept. 1-30.....			Present.
Huancabamba.....	May 1-June 30.....	34	25	
Huacho.....	July 1-31.....	1		
Hualal.....	June 1-30.....	2	2	
Do.....	July 1-Sept. 30.....	3	1	
Lima (city).....	May 1-31.....	17	8	Sept. 1-30, 1923: Present on country estates.
Do.....	July 1-Sept. 30.....	14	8	
Lima (country).....	May 1-31.....	7	4	
Do.....	July 1-Sept. 30.....	3	2	
Mollendo.....	June 1-30.....	1	1	
Reque.....	Aug. 1-31.....	1	1	
Salaverry.....	May 1-June 30.....	11	3	
Trujillo.....	do.....	2	3	
Russia.....				
				Jan. 1-May 15, 1923: Few cases in Far East regions.
Senegal:				
Dakar.....	July 1-31.....	4	4	Reported to have come from port of Rufisque, Senegal.
Rufisque.....	Aug. 6.....			Present.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**Reports Received from June 30 to November 16, 1923—Continued.****PLAGUE—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Siam:				
Bangkok.....	Apr. 29-June 30....	31	30	
Do.....	July 1-Sept. 16....	11	11	
Siberia.....				Sporadic cases of plague reported yearly in localities vicinity of stations Matsievskaya and Borzja, Transbaikai Railway.
Haramhor.....	May 6.....	1	1	Village in zone of endemic tarabagan (marmot) plague, Transbaikai region.
Station No. 83.....				Station on Transbaikai Railway. Marmot plague during recent years.
Soktu.....				Do.
Straits Settlements:				
Singapore.....	May 6-June 30....	6	8	
Do.....	July 22-Sept. 22....	4	3	
Syria:				
Beirut.....	May 12-June 20....	3		
Do.....	July 1-Sept. 30....	7	1	
Turkey:				
Constantinople.....	Aug. 19-Sept. 22....		2	On Aug. 16, 1923, 2 cases reported
On vessel:				
S. S. Crewe Hall.....	Oct. 15.....	1		At Catania, Italy. Patient embarked at Port Said, Egypt. Vessel left Vizacapatam, India, Aug. 29; at Colombo, Ceylon, Sept. 12; Aden, Sept. 23; Port Sudan, Sept. 26; sailed for New York Oct. 15, 1923.

SMALLPOX.

Algeria:				
Algiers.....	May 1-31.....	2		
Do.....	July 1-Aug. 10....	3		
Arabia:				
Aden.....	May 27-June 2.....		2	
Do.....	July 8-Sept. 30....	8	2	
Austria:				
Vienna.....	July 29-Aug. 4.....	1		
Azores:				
St. Michael Island.....	July 15-21.....	7		Mild.
Bolivia:				
La Paz.....	Apr. 1-June 30....	2	3	
Brazil:				
Bahia.....	Aug. 19-Sept. 22....	6		
Manaos.....				Year 1921: Cases, 2; year 1922, 1 case.
Pernambuco.....	May 6-June 16....	5		
Do.....	July 1-Sept. 1.....	46	4	
Rio de Janeiro.....	May 13-June 23....	25	3	
Do.....	July 15-Sept. 29....	41	10	
Rio Grande do Sul.....				Jan. 1-Mar. 31, 1923; Present with some mortality.
British East Africa:				
Kenya—				
Mombasa.....	May 20-26.....	1		From vessel from Bombay.
Tanganyika.....	Apr. 20-June 9....	3		Territory.
Do.....	July 1-28.....	27	6	Do.
Uganda—				
Entebbe.....	Apr. 1-30.....	4		
Zanzibar.....				July 1-31, 1923; Cases, 7; deaths, 3.
Canada:				
Alberta—				
Calgary.....	May 27-June 2.....	1		Infection from Deer Lodge, Mont.
British Columbia—				
Vancouver.....	May 27-June 30....	33	1	
Do.....	July 1-Sept. 15....	15	1	
Victoria.....	Aug. 5-25.....	2		
Manitoba—				
Winnipeg.....	June 3-30.....	1		
Do.....	July 1-Oct. 20....	5		
New Brunswick—				
Kent County.....	July 1-7.....	1		

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

Reports Received from June 30 to November 16, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Canada—Continued.				
Ontario.....				June 1-30, 1923: Cases, 13. July 1-Sept. 30, 1923: Cases, 48.
London.....	July 15-21.....	1		
Toronto.....	June 24-30.....	3		
Do.....	July 15-21.....	1		
Quebec.....				
Quebec.....	June 10-16.....	1		Varioloid.
Saskatchewan—				
Moose Jaw.....	July 8-14.....	1		
Regina.....	June 24-30.....	3		
Do.....	Oct. 7-13.....	1		
Ceylon:				
Colombo.....	May 6-June 2.....	23	1	
Chile:				
Concepcion.....	May 22-June 11.....		3	June 1-30, 1923: Cases, 2. July 1-31, 1923: 1 death.
Do.....	Sept. 1-17.....	2		Landed from vessel.
Talcahuano.....	Aug. 12-18.....	1		June 10-16, 1923: 29 cases reported from 2 districts.
Valparaiso.....	May 7-June 23.....	6	121	July 30, 1923: 25 cases in lazaretto. Aug. 6: 20 cases. Aug. 14: 60 cases present.
Do.....	July 1-28.....	12	10	
China:				
Amoy.....	May 13-June 23.....		3	June 19-25, 1923: Present.
Do.....	July 1-Sept. 29.....			Present.
Antung.....	May 14-20.....	1		
Canton.....				June 1-30, 1923: Present. July 1-31, 1923: Present.
Chungking.....	May 13-June 30.....			Present and endemic.
Do.....	July 1-Sept. 29.....			Do.
Foochow.....	May 13-Sept. 8.....			Present.
Hongkong.....	Apr. 29-June 30.....	98	82	
Do.....	July 1-Sept. 1.....	55	49	
Manchuria—				
Dairen.....	May 21-27.....	1		
Harbin.....	May 7-June 24.....	5		
Do.....	July 1-Sept. 2.....	6		
Mukden.....	May 13-20.....	1		
Nanking.....	May 13-June 23.....			Do.
Do.....	June 24-Sept. 22.....			Do.
Shanghai.....	May 21-June 3.....	4		Foreign.
Do.....	July 2-Aug. 26.....	1	4	Cases, foreign; deaths, Chinese.
Chosen (Korea):				
Chemulpo.....	May 1-31.....	1		
Fusan.....	May 1-June 30.....	4		
Do.....	July 1-31.....	22	6	
Gensan.....	May 1-31.....	1		
Seoul.....	May 1-June 30.....	42	13	
Do.....	July 1-Aug. 31.....	7	9	
Cuba:				
Antilla.....	July 8-14.....		2	From Preston.
Czechoslovakia.				Jan.-Mar., 1923: Cases, 15. Apr.-June, 1923: Cases, 16; deaths, 4.
Province—				
Bohemia.....	Jan. 1-Mar. 31.....	15	4	
Ecuador:				
Alausi.....	July 16-31.....	3		
Bahia.....	Sept. 1-15.....	4		
Esmeraldas.....	Aug. 16-Sept. 15.....	5		
Guayaquil.....	May 16-31.....	1		
Jipijapa.....	Sept. 1-15.....	8		
Monte Cristi (Manabi).....	do.....	20		May 16-30, 1923; Present.
Riobama.....	May 16-30.....	1	1	
Rocafuerte.....	do.....			Do.
Santa Ana.....	Sept. 1-15.....	10		
Vinces.....	do.....			Present in district.
Zaruma (El Oro).....	May 16-30.....			Present.
Egypt:				
Cairo.....	Mar. 12-July 1.....	24	8	
Estonia.				June 1-30, 1923: Cases, 4. Aug. 1-31, 1923: Cases, 2.
Finland.				May 1-15, 1923: 1 case. July 2-31, 1923: 1 case. Aug. 1-31, 1923: 2 cases.
French Guiana.				Nov.-Dec., 1923: Present. June 6, 1923: Present.
Cayenne.....				Year 1922: Present.

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**Reports Received from June 30 to November 16, 1923—Continued.****SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Great Britain:				
Birmingham.....	June 18-30.....	3		Present.
Bristol.....	June 23.....			Present.
Cardiff.....	June 3-30.....	6		
Gloucester.....	June 23.....			123 cases reported in hospital; present in rural districts. July 15, 1923: Present. Aug. 9, 1923: 33 cases in isolation hospital; two weeks previously about 250 cases present in hospital.
Do.....	July 12.....	19		Sept. 22, 1923: Additional cases in Middlesex County.
London.....	Sept. 9-29.....	5	1	May 1-31, 1923: Cases, 211.
Nottingham.....	June 3-9.....	1		
Do.....	July 8-Sept. 22.....	6		
Sheffield.....	Sept. 16-22.....	3		
Greece:				
Athens.....	May 1-31.....	53		
Patras.....	Apr. 24-June 15.....		19	
Saloniki.....	Apr. 30-May 20.....	2	2	
Do.....	June 25-July 8.....	2	3	
Guadeloupe (West Indies).				July 22-Aug. 4, 1923: Present in epidemic form. (Reported as alastrim.) Aug. 17, 1923: Stated to be officially declared present. Sept. 14-29: Epidemic generally diffused. Oct. 13, 1923: Epidemic.
Basse Terre.....	Aug. 17-Oct. 13.....			Present.
Pointe à Pitre.....	Aug. 17.....			Estimated from 2,000 to 3,000 cases. Sept. 2-8, 1923: 1,500 cases present; 8 deaths reported.
Hungary				July 15-Aug. 4, 1923: Cases, 28.
India:				Apr. 15-June 30, 1923: Cases, 8,112; deaths, 2,933. July 1-Sept. 1, 1923: Cases, 8,403; deaths, 2,064.
Bombay.....	Apr. 22-June 30.....	298	141	
Do.....	July 1-Sept. 22.....	72	36	
Calcutta.....	May 13-June 9.....	12	9	
Do.....	July 1-Sept. 8.....	19	14	
Karachi.....	May 13-June 30.....	24	8	
Do.....	July 1-Oct. 6.....	16	5	
Madras.....	May 13-June 23.....	91	16	
Do.....	July 8-Sept. 29.....	55	16	
Rangoon.....	May 6-June 30.....	125	67	
Do.....	July 1-Sept. 15.....	46	19	
Indo-China				Nov. 1-Dec. 31, 1922: Cases, 234; deaths, 68.
City—				Including 100 surrounding square kilometers.
Saigon.....	May 20-June 30.....	34	23	Do.
Do.....	July 1-28.....	31	18	
Provinces—				
Annam.....	Nov. 1-30.....	3	1	
Do.....	Jan. 1-Feb. 28.....	10	1	
Cambodge.....	Nov. 1-Dec. 31.....	97	41	
Do.....	Jan. 1-Feb. 28.....	63	17	
Cochin-China.....	Nov. 1-Dec. 31.....	125	34	
Do.....	Jan. 1-Feb. 28.....	231	67	
Laos.....	Feb. 1-28.....			A few cases.
Tonkin.....	Dec. 1-31.....	9	1	
Do.....	Jan. 1-Feb. 28.....	69	13	
Iraq (Mesopotamia):				
Bagdad.....	Apr. 1-June 30.....	32	11	
Do.....	July 31-Sept. 4.....	13		
Italy:				
Leghorn.....	Sept. 17-23.....	6		
Turin.....	May 28-June 3.....	1		
Do.....	July 2-15.....	2		
Jamaica:				May 27-June 30, 1923: Cases, 226; July 1-Oct. 13, 1923: Cases, 414. (Reported as alastrim.)
Kingston.....	May 27-June 30.....	39		
Do.....	July 1-Oct. 13.....	47		
Japan:				
Kobe.....	May 28-June 10.....	2		
Do.....	July 2-8.....	1		
Java:				
East Java.....				Aug. 26-Sept. 1, 1923: Cases, 36; deaths, 3.
Soerabaya.....	Apr. 22-June 30.....	187	22	
Do.....	July 15-Aug. 25.....	64	15	
Soerakarta.....				July 31, 1923: Epidemic.

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

Reports Received from June 30 to November 16, 1923—Continued.

SMALLPOX—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Java—Continued.				
West Java—				
Batavia.....	May 5-June 8.....	17	3	Province.
Do.....	June 30-Sept. 7.....	3	1	Do.
Latvia.....				Apr. 1-May 31, 1923: Cases, 8.
Martinique.....				May 26-Sept. 29, 1923: Present.
Mexico:				
Aguascalientes.....	July 8-14.....		1	
Chihuahua.....	June 11-24.....	7		
Guadalajara.....	July 22-Sept. 22.....		10	June 1-30, 1923: Cases, 15; deaths, 2.
Mexico City.....	May 19-June 30.....	164		Including municipalities in Federal district.
Do.....	July 1-Oct. 6.....	204		Do.
Palestine:				
Jaffa.....	June 5-11.....	1		
Persia:				
Tabriz.....	Apr. 1-June 30.....		2	District.
Teheran.....	Feb. 22-June 14.....		30	Mar. 22-June 22, 1923: Deaths, 12.
				June 23-July 22, 1923: Deaths, 9.
				Apr. 29-June 30, 1923: Cases, 1,861; deaths, 43. July 1-Aug. 12, 1923: Cases, 20; deaths, 6.
Poland.....				
Portugal:				
Lisbon.....	May 20-June 30.....	35	3	
Do.....	July 1-Sept. 29.....	46	12	
Oporto.....	June 10-30.....	6	3	
Do.....	July 9-Oct. 12.....	56	43	
Portuguese West Africa:				
Angola:				
Loanda.....	Apr. 1-21.....	2		
Do.....	July 29-Aug. 18.....		2	
Rhodesia (British Africa):				
Northern Rhodesia.....	May 8-14.....	21	8	
Southern Rhodesia.....	May 3-16.....	4	2	
Siam:				
Bangkok.....	Apr. 29-June 30.....	90	53	
Do.....	July 1-Sept. 15.....	303	174	Apr. 22-Aug. 25, 1923: Cases, 329; deaths, 184. Sept. 8, 1923: Reported prevalent.
Sierra Leone:				
Freetown.....	July 16-31.....	1		Landed from S. S. Tsad, from Southampton via Las Palmas in Sembehun district.
Kaballa.....	May 1-15.....	1		
Pujehun.....	May 16-31.....	1		
Sambuya.....	Aug. 1-15.....	1		
Spain:				
Barcelona.....	May 31-June 6.....		1	
Do.....	June 28-Oct. 3.....		8	
Seville.....	July 19-25.....		1	
Valencia.....	May 15-June 30.....	44	2	
Do.....	July 1-Oct. 13.....	8	8	
Switzerland:				
Basel.....	May 27-June 30.....	4		
Do.....	July 8-Aug. 25.....	3		
Berne.....	May 20-June 30.....	11		
Do.....	July 1-Sept. 29.....	14		
Luzerne.....	May 1-June 7.....	36		
Do.....	July 1-Sept. 30.....	18		
Zurich.....	May 20-June 23.....	10		
Do.....	July 15-Sept. 15.....	9		
Syria:				
Aleppo.....	July 15-31.....	6		
Damascus.....	May 15-June 11.....	7		
Do.....	Aug. 16-Sept. 4.....	4	1	
Tunis:				
Bizerta.....	June 10-20.....	1		
Tunis.....	June 11-17.....	1		
Do.....	June 26-July 1.....	1		
Turkey:				
Constantinople.....	May 13-June 26.....		45	
Do.....	June 27-Sept. 22.....	1	18	
Union of South Africa:				
Cape Province.....				May 1-June 30, 1923: Cases, 66; deaths, 1 (colored). July 1-31, 1923: Cases, 17 (colored). May 1-31, 1923: Cases, 32 (colored). July 1-31, 1923: Cases, 10 (colored).

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued.**Reports Received from June 30 to November 16, 1923—Continued.****SMALLPOX—Continued.**

Place.	Date.	Cases.	Deaths.	Remarks.
Union of South Africa—Contd.				
Cape Province.....	May 6-June 30.....	.....	.....	Outbreaks.
Do.....	July 1-Sept. 15.....	.....	.....	Do.
East London.....	July 8-14.....	1	.....
Natal.....	do.....	.....	.....	July 1-31, 1923: 1 case (colored).
Orange Free State.....	Apr. 29-June 30.....	.....	.....	Outbreaks.
Do.....	Sept. 9-15.....	.....	.....	July 1-31, 1923: Cases, 4 (colored).
Transvaal.....	.....	.....	.....	Outbreaks.
Do.....	July 1-Aug. 31.....	.....	.....	May 1-31, 1923: 1 case. July 1-31, 1923: Cases, 2 (colored).
Yugoslavia.....	.....	.....	.....	Outbreaks.
Province—	.....	.....	.....	July 1-7, 1923: Cases, 8; deaths, 1.
Bosnia-Herzegovina.....	July 1-7.....	1	.....
Croatia-Slavonia.....	do.....	4	1	
Zagreb.....	June 24-30.....	1	.....
Serbia.....	July 1-7.....	2	1	
Belgrade.....	June 10-16.....	1	1	
Do.....	July 8-14.....	.....	1	
Voivodina.....	July 1-7.....	1	.....
On vessels:				
S. S. Kargola.....	May 20-26.....	1	.....	At Mombasa, British East Africa. Vessel arrived from Bombay, Mar. 25, 1923.
S. S. Makura.....	May 26.....	2	.....	Two cases in quarantine (reported as alastrim). Vessel left Victoria, B. C., Apr. 23, 1923. Touched at Honolulu.
S. S. Tsad.....	July 16-31.....	.....	.....	At Freetown, Sierra Leone, Africa, from European and West African ports.
S. S. —.....	Aug. 12-18.....	1	.....	Landed at Talcahuano, Chile.

TYPHUS FEVER.

Algeria:				
Algiers.....	May 1-June 30.....	66	19	
Do.....	.....	.....	.....	July 1-Sept. 30, 1923: Cases, 6; deaths, 6.
Argentina:				
Rosario.....	May 25-31.....	.....	3	
Bolivia:				
La Paz.....	June 1-30.....	4	.....
Do.....	July 1-31.....	8	1	
Bulgaria:				
Sofia.....	Apr. 22-June 23.....	11	2	Paratyphus, 2 cases; 2 deaths.
Do.....	July 15-Sept. 1.....	17	1	Paratyphus, 5 cases. Sept. 2-22, 1923: Paratyphus, cases, 4.
Canary Islands:				
Teneriffe.....	Nov. 6.....	.....	.....	Present.
Chile:				
Concepcion.....	May 22-June 18.....	.....	3	
Do.....	Aug. 7-13.....	.....	1	
Iquique.....	Sept. 2-8.....	.....	1	
Talcahuano.....	May 13-19.....	1	.....
Valparaiso.....	May 7-June 23.....	.....	26	
Do.....	July 1-Aug. 25.....	.....	43	June 11, 1923: 34 cases in Salvador Hospital. July 30, 1923: 45 cases in hospital. Aug. 6: 58 cases. Aug. 12-18: 82 cases stated to be present. Aug. 25: 88 cases in Lazaretto.
China:				
Antung.....	May 28-June 24.....	12	.....
Do.....	July 16-22.....	1	.....
Chungking.....	Aug. 26-Sept. 8.....	.....	.....	Endemic.
Hankow.....	May 19-25.....	1	.....
Manchuria—				
Harbin.....	May 6-13.....	1	.....
Do.....	Aug. 27-Sept. 2.....	2	.....
Mukden.....	May 14-20.....	2	.....
Czechoslovakia				
Province—				
Bohemia.....	Apr. 1-June 30.....	8	.....	Jan.-Mar., 1923: Cases, 191; deaths, 6. Apr. 1-June 30: Cases, 132; deaths, 4. Paratyphoid A, 1; paratyphoid B, 20.
Moravia.....	do.....	2	.....
Russinia.....	do.....	98	1	
Silesia.....	do.....	1	.....
Slovakia.....	do.....	23	2	

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

Reports Received from June 30 to November 16, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Egypt:				
Alexandria.....	May 14-June 24.....	7	5	Paratyphoid fever, 2 cases.
Do.....	June 25-Sept. 16.....	11	6	
Cairo.....	Apr. 12-June 24.....	44	29	
Do.....	June 25-July 22.....	12	9	
Port Said.....	Aug. 3-19.....	1	.....
Estonia.....				June 1-30, 1923: Recurrent typhus, 1 case; paratyphus, 2 cases.
Finland.....	Sept. 16-30.....	1	.....	Aug. 1-15, 1923: Paratyphus, 16 cases. Sept. 1-15, 1923: One case recurrent typhus. Sept. 16-30, 1922: Paratyphus, cases, 22.
France:				
Marseille.....	Mar. 1-May 31.....	.....	3	
Germany:				
Coblenz.....	May 27-June 2.....	.....	1	
Do.....	July 29-Sept. 22.....	10	.....
Hamburg.....	May 20-26.....	3	.....
Do.....	July 29-Aug. 4.....	1	.....	Case developed July 28, 1923, at Emigration Hall, Hamburg.
Königsberg.....	May 13-June 2.....	2	.....
Do.....	Aug. 12-18.....	1	.....
Stettin.....	May 27-June 9.....	1	1	
Stuttgart.....	Sept. 2-22.....	4	.....
Great Britain:				
Ireland—				
Cork.....	Aug. 19-25.....	1	1	
Greece.....				May 1-31, 1923: Cases, 876.
Athens.....	May 1-31.....	150	5	
Do.....	July 22-31.....	.....	1	
Patras.....	Apr. 24-June 15.....	.....	30	
Do.....	Aug. 16-31.....	.....	2	
Piræus.....	May 1-June 30.....	356	11	
Do.....	July 1-10.....	3	.....
Saloniki.....	Apr. 30-June 24.....	56	16	Apr. 30-May 27, 1923: Recurrent typhus: Cases, 3; deaths, 3.
Do.....	July 9-15.....	1	.....
Guatemala:				
Guatemala City.....	Apr. 1-June 30.....	.....	5	
Hungary.....				Jan. 1-May 19, 1923: Cases, 318; deaths, 36. In 11 counties.
Budapest.....	Jan. 1-June 2.....	48	12	
Do.....	Sept. 2-8.....	1	.....
Iraq (Mesopotamia):				
Bagdad.....	Apr. 1-June 30.....	3	.....
Do.....	Aug. 8-15.....	1	1	
Japan:				
Nagasaki.....	July 2-8.....	1	.....
Java:				
East Java—				
Soerabaya.....	July 29-Aug. 18.....	16	3	
Latvia.....				Apr. 1-June 30, 1923: Cases, 231; paratyphus, 5 cases. June 1-July 31, 1923: Cases, 67; paratyphus, 1 case; recurrent typhus, 1 case.
Mexico:				
Guadalajara.....	June 1-30.....	1	.....
Do.....	July 1-Aug. 31.....	2	1	
Mexico City.....	May 20-June 30.....	75	.....	Including municipalities in Federal District.
Do.....	July 1-Sept. 29.....	142	.....
San Luis Potosi.....	July 29-Aug. 4.....	.....	1	Do.
Palestine.....				Aug. 14-20, 1923: One case, in northern district.
Jaffa.....	May 22-28.....	2	.....	Relapsing fever, 1 case.
Do.....	June 26-Aug. 6.....	5	.....
Jerusalem.....	May 22-28.....	1	.....
Persia:				
Tabriz.....	Apr. 1-14.....	2	.....
Teheran.....	Feb. 22-June 14.....	.....	4	
Do.....	July 1-22.....	.....	1	
Poland.....				Mar. 4-Apr. 7, 1923: Cases, 2,253; deaths, 172. Recurrent typhus: Cases, 338; deaths, 6. Apr. 2-June 30, 1923: Cases, 2,203; deaths, 177. July 1-Aug. 18, 1923: Cases, 544; deaths, 46. Recurrent typhus: Apr. 29-June 23, 1923: Cases, 337; deaths, 3. July 1-Aug. 18, 1923: Cases, 102; deaths, 4.

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

Reports Received from June 30 to November 16, 1923—Continued.

TYPHUS FEVER—Continued.

Place.	Date.	Cases.	Deaths.	Remarks.
Portugal:				
Oporto.....	June 10-16.....	1		
Do.....	July 1-21.....	3		
Rumania:				
Kishineff.....	May 1-June 30.....	41		
Do.....	Aug. 1-31.....	10		District.
Russia:				Jan. 1-Apr. 30, 1923. Cases,
European Russia and au-	Jan. 1-Apr. 30.....	93,999		106,854. (Corresponding
tonomous republics.				period 1922: Cases, 847,516.)
Siberia, Caucasus, and Cen-	.....do.....	9,921		Feb. 1-28, 1923: Cases, 17,577.
tral Asia.				Recurrent, Jan. 1-Feb. 28, 1923:
Waterways and railways.....	.....do.....	2,934		Cases, 43,540.
Spain:				
Barcelona.....	June 21-27.....		1	
Do.....	Aug. 23-Oct. 3.....		13	
Madrid.....	May 1-31.....		1	
Do.....	July 1-31.....		2	
Sumatra:				
Medan.....	May 1-June 30.....	34		
Switzerland:				
Zurich.....				Sept. 16-22, 1923: Paratyphus
				fever, cases, 5.
Syria:				
Aleppo.....	May 20-June 16.....	4	2	
Do.....	July 15-21.....	3	1	
Beirut.....	May 1-10.....	1		
Tunis:				
Tunis.....	May 23-June 24.....	3	2	
Do.....	July 9-Oct. 7.....	1	2	
Turkey:				
Constantinople.....	May 13-June 26.....		19	
Do.....	June 27-Sept. 22.....	5	11	
Union of South Africa:				
				May 1-June 30, 1923: Cases, 230;
				deaths, 47 (colored). White—
				Cases, 15; deaths, 1. Total,
				245 cases, 48 deaths. July 1-31,
				1923: Cases, 133 (colored, 132
				cases; white, 1 case); deaths, 24.
				May 1-31, 1923: Cases, 49 (col-
				ored); White, 5. July 1-31,
				1923: Cases, 94; deaths, 21
				(colored).
Cape Province.....				Outbreaks.
Do.....	Aug. 12-Sept. 15.....			May 1-31, 1923: One case (col-
Natal.....				ored).
Orange Free State.....				May 1-31, 1923: Cases, 45 (col-
				ored). July 1-31, 1923: Cases,
				36; deaths, 3 (colored). One
				case in white population.
				Outbreaks.
Do.....				Do.....
Transvaal.....	May 6-June 16.....			May 1-31, 1923: Cases, 7. July 1-
Do.....	Aug. 12-25.....			31, 1923: Cases, 2 (colored).
Johannesburg.....	May 1-June 30.....	4	4	July 1-7, 1923: Cases 4.
Yugoslavia:				
Province—				
Bosnia-Herzegovina.....	July 1-7.....	4		
Croatia-Slavonia—				
Zagreb.....	May 27-June 2.....	1		
Serbia—				
Belgrade.....	Aug. 12-18.....	1		

YELLOW FEVER.

Brazil:				
Bahia.....	May 13-June 30.....	25	6	
Do.....	July 1-Sept. 8.....	13	6	
Colombia:				
Bucaramanga.....	June 25-Aug. 26.....			Present.