

Mortality of Philadelphia for 1860.

REPORT

ON

METEOROLOGY AND EPIDEMICS.

READ BEFORE

THE COLLEGE OF PHYSICIANS OF PHILADELPHIA,

FEBRUARY 6, 1861.

BY

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IN offering my report for 1860, I must again acknowledge my indebtedness to James A. Kirkpatrick, Esq., Prof. of Civil Engineering in the Philada. High School, for an abstract of the tables of his meteorological observations during the year. (pp. 82-83.) The accuracy of these tables is undoubted, while their usefulness for present and future reference will be admitted.

The following summary of these observations is from his own pen.

The mean temperature of the year (1860) was less than four-tenths of a degree below that of the year 1859, and nearly two-tenths of a degree below the average for the last nine years.

The maximum temperature ($95\frac{1}{2}^{\circ}$) occurred on the 20th of July. The minimum temperature, one degree above zero, was on the 2d of February.

The warmest day of the year was the 20th of July, when the mean temperature was 87.7° . The coldest day was the 2d of February, the mean for that day being 9.2 degrees.

Of the seasons, the spring was one degree warmer, and the summer one degree colder than the average for nine years, while the winter and autumn were very close to the average.

Of the months, the greatest variation from the average was in December, which was nearly 3° colder than usual, and was the coldest December since 1856.

The maximum pressure of the atmosphere (29.418 inches), occurred on the 14th of December; and the minimum pressure (29.099), on the 18th of February. The average pressure was very nearly the same as that for 1859. It may be interesting to notice that the average pressure, as indicated by the mean of the three observations, is very nearly the same as the mean of the observations at 9 P. M., the difference for the whole ten years being only .002 of an inch.

It is becoming also to inform the college that, in consequence of the inauguration of the new law for the registration of births, marriages, and deaths, which went into operation, under the supervision of the Board of Health, on the 1st of July, 1860, I have rearranged the tables, that they might conform to those published by that Board, and have added tables of the births and marriages registered since the law was enforced.

I have also changed the order of grouping the diseases, which order has been faithfully preserved since 1850. This change occurs at a suitable

time, as the tables already published by the college embrace a statistical decade from 1850 to 1859, and is well adapted for calculations as to the vital statistics of our city.

No apology need be offered for making this alteration. As a member of the committee "on a uniform plan of registration reports of births, marriages, and deaths," appointed by the American Medical Association, and whose report was adopted by the Association at its meeting in Louisville, Ky., May, 1859, and subscribing cordially to the suggestions therein made, I could do no less, when an opportunity offered, than to follow out the recommendation of the committee for the forms of tables—both as to the classification and nomenclature of the causes of death—which, with but few alterations, are the same as were adopted by the Association in 1847. This favourable opportunity has occurred, and I have embraced it, in framing this report. Another feature herein embodied, and one that modifies the report in several respects, is the reference to the statistics of our total population, as well as of the population of the several wards. This modification has been effected through the operation of the eighth U. S. Census, which was taken during the month of June, 1860.

From the figures, as given by the marshal of this district, I find that he makes our population 568,034, an increase over the population for the census of 1850 of 159,272, or 39 per cent. Should this statement be correct, it gives us an average growth of about 3 per cent. per annum. But the question arises, have authentic returns been received? When we take into consideration, the usual growth of large cities—which will exceed 5 per cent.—the length of time occupied in obtaining the returns—a month—the season of the year—June—when a large portion of our population had left the city for the summer, and the number of houses shut up, where no answers could be obtained, the natural inference will be, that justice has not been done to the vital statistics of Philadelphia. This opinion is by no means peculiar to myself. There are others who have investigated the subject, and are satisfied that the total of population as given in the marshal's returns, is below the actual number, and at variance with facts. But such is the census return, and it goes abroad as correct. During the present decade, therefore, we shall lose the advantage we would otherwise gain from a true record of the number of our inhabitants; unless Councils should determine to have a census taken, in order to place the city, in point of population, where she rightfully belongs, as has been properly suggested by the mayor in his last message to that body.

The introduction of the tables of births and marriages, for the last six months of 1860—if not of any practical application at the present time, seems to be proper, in order to preserve an entire uniformity with our new system of registration, and thus establish a plan after which our vital statistics and our sanitary inquiries may be framed in the future.

From the annual report of the Board of Health I learn that, thus far the law for the registration of births, marriages, and deaths which this college, in connection with the Philadelphia County Medical Society, was instrumental in having enacted, "is popular, and its present success not only affords an evidence of the appreciation in which it is held by the most of those interested, but gives encouragement for its future progress and permanency."

"The registration of the names of all persons who are required to make returns under this law, has been, with a few exceptions, both cheerfully and faithfully complied with by the parties themselves. The necessary register has been alphabetically arranged under three distinct heads, and

contains at this time the autographs of 1302 clergymen, physicians, &c., with their respective residences in our city, as follows:—

Clergymen	370
Clerks of the records of religious societies	4
Physicians	701
Practitioners (female) of midwifery	51
Mayor	1
Aldermen	36
Undertakers	79
Superintendents of burial grounds	60

1302

“Since the law went into effect, up to the 31st of December, 1860, a period of six months, there have been returned and registered 8434 births, 2310 marriages, and 6342 deaths.

“It would be unreasonable to suppose that the statistical contributions, as detailed in these registers, could at this incipient stage of the record be made available, or answer any valuable purpose in reference to the vital statistics of our city. All that is contemplated in this first report, is to furnish an abstract of the returns in tabular form, which will serve as a basis of reliable data for the preparation of future reports. It is only by the accumulation of facts connected with vital and mortuary statistics, during a succession of years, carefully and intelligently collated, and accurately aggregated and compared, that the laws governing human existence can be determined.

“Each new annual report will be entitled to additional consideration from its increased value, arising from the useful information it will furnish to those who shall hereafter engage in the investigation of the science of vital statistics. We trust, therefore, that the inauguration of this new and important system is the beginning of a reform in the science of life in our city, and that this limited contribution may be followed annually hereafter by more extended, more valuable, and more interesting reports.”

I have also availed myself of several of the tables, for this report, as compiled by the registration clerks of the health office, because they were prepared according to the instructions of your reporter, and are in conformity with his own views of tabulating and collating the records of births, marriages, and deaths.

BIRTHS.—The number of births returned and registered for the six months of the year, under the new law, will be found in Table I. They amount to 8,434. Of these, 4,426 were males and 4,008 females. An excess of male births equal to 10.40 per cent.

In the same table will be found the births that occurred in each of the six months; those in each ward of the city; the population of each ward according to the census returns, together with the percentage of births to population in each ward.

From this we learn that the Nineteenth Ward furnished the highest number of births, viz., 623, and the Eighth Ward the lowest number, viz., 184.

August seems to have been the most prolific month in births, giving 1,575, while December gave but 1,247.

According to the population of the wards, the highest percentage of births must be awarded to the Seventeenth, viz., 456, or 1.95 per cent., and the lowest to the Eighth, viz., 184, or 0.66 per cent., while the ratio of births to population in each ward is in favour of the Seventeenth, which yielded 1 in every 51.

The registration of births of coloured children, amounting to 148—82 males and 66 females—can hardly be relied upon for its correctness, as I have reason to believe that the colour in every instance has not been designated.

Fifty-seven cases of twin births were registered, and there was one instance of triplets.

The month of August yielded 15 cases of twin births, December 11, July 10, November 9, September 7, and October 5.

As an evidence of the estimation in which the registration law is held by those who are required to make returns of births, there were only 155, or less than 2 per cent. returned without the location being designated.

If the returns of births made for the last six months are to be considered as the half of those that have occurred for the year, they would give a total of 16,868, which is equivalent to 1 in every 35 of our population, allowing that our population is equal to 600,000 instead of 568,034, as given by the census. These returns are a more favourable indication of the general hygienic state of the city than has ever before been shown by our birth statistics.

The stillborn children for the six months numbered 347—208 males and 139 females—an excess of 69 male births, equal to 50 per cent. The stillborn are included in the general table of births, according to the recommendation of the American Medical Association. They were in the proportion to the living births as 1 in every 24, or 4 per cent.

MARRIAGES.—Since July 1st, the number of marriages registered under the new law amounts to 2,310. See Table II.¹

Of the number registered, 2,371 of the parties were Americans by birth, and 1,961 were born in other countries. The birthplaces of 288 were not given.

Of the married couples, 1,138 of the grooms, or 49 per cent., were born in the United States; 1,025, or 44 per cent., were of foreign birth, and of 147, or 6 per cent., the birthplaces were omitted.

Of the brides, 1,233, or 53 per cent., were native born; 936, or 40 per cent., were of foreign birth, and 141, or 6 per cent., were registered as unknown.

The instances in which American men married American women were 999, or 43 per cent.; while those cases where both parties were of foreign birth amounted to 801, or 34 per cent. of the whole.

Only 125, or 5 per cent. of American men married women of foreign birth, while 220, or 9 per cent. of American women were united to foreigners.

Table III. gives the ages of the parties married. Of the grooms, only 10 were under 20 years of age; 834, or 36 per cent., were between 20 and 25 years; 635, or 27.35 per cent., between 25 and 30 years; 433, or 18 per cent., between 30 and 40 years; and beyond that period of life there were 154, while of 244 grooms the age has been omitted.

Of the brides, 464, or 20 per cent., were under 20 years of age; 948, or 41 per cent., between 20 and 25 years; 369, or 16 per cent., between 25 and 30 years; 217 between 30 and 40 years; beyond that age there were only 60 registered according to age, while in 252 of the marriages the ages of the brides were not given.

¹ This, however, cannot be considered a correct estimate of the marriages in our city. That it falls short of the true number I have not a doubt; at the same time it must be received as a fair beginning for the inauguration of a law which, judging from the returns, has but few friends among the clergy.

The greatest inequality of ages was presented in the marriage of a groom between 60 and 70 to a bride between 20 and 25 years of age.

There were 8 grooms registered under 20 years of age. One groom was 18 and his bride 17 years of age.

The popular age for marriage, according to this table, is between 20 and 25 years. The second favourite age, with females, is under 20; but with males, between 25 and 30 years.

MORTALITY OF PHILADELPHIA.—Herewith will be found a general summary of deaths for the year. It is so divided or classified as to show at a glance the white and coloured, the male and female, the adults and minors, those deaths from actual disease, and those from accidental or other external causes.

General Summary of Deaths.

Total number of deaths reported for 1860	11,568
White	10,949
Coloured	619
Total	11,568
Males	6,109
Females	5,459
Total	11,568
Male minors or children	3,594
Female " "	3,125
Total minors	6,719
Male adults	2,515
Female adults	2,334
Total adults	4,849
Deaths from registered diseases	10,055
Deaths from stillborn	719
Deaths from old age	213
Deaths from unknown external and accidental causes	581
Annual total of deaths from all causes	11,568

According to the above summary, the deaths for the year, from Dec. 31, 1859, to Dec. 29, 1860, amount to 11,568.

This mortality shows an increase of 1,826, or 18.74 per cent. over that for 1859.

This augmentation in our mortality may be ascribed principally to the increased force and diffusion of certain diseases; while the improved system of collecting the deaths under the registration law, which has been in operation since the first of July, has no doubt furnished us with more correct returns.

It is well understood that during 1859 our city was favoured with a remarkable degree of health. The deaths were 9 per cent. below those of 1858, and 12.19 per cent. below the average of deaths for the previous four years.

Nor did it create any surprise that the correctness of the returns for that year as presented in my report to the College, should be questioned by statisticians abroad. And notwithstanding there may be causes that have been developed since the new law of registration went into operation to account in some measure for the limited returns of deaths in 1859, still, when I consider that the mortality was 12 per cent. below that of the

average of deaths for the preceding four years, which deaths were returned under the same law, and when I know, from a comparison of the records for 1859 and 1860 that there has been an increased force and diffusion of certain diseases during the latter year, I am not prepared to ascribe either the limited number of deaths in 1859 altogether to defective returns, or the augmentation of deaths in 1860 altogether to the improved system under the new law.

An examination of the returns for the first six months of 1860, which were made under the old law, shows an increase of 7.55 per cent. over those for the same period in 1859; while the deaths in this latter year were 9 per cent. less than those in 1858; and when I discover that the deaths from diphtheria and scarlet fever in the last six months of 1860 have increased 343 per cent. over those for the last six months of 1859, I cannot be forced to the conclusion that the augmentation of deaths in 1860 is attributable to the defective returns under the old law.

If I have been led into any error in my calculations for 1859, it must be ascribed to the circumstance of overrating the population, an error into which statisticians in large cities have been sometimes led.

Of the total of deaths 6,109 were males and 5,459 were females; an excess of male deaths equivalent to 12 per cent.

The mortality among minors, or those under twenty, was 6,719, while that of adults was only 4,849; an excess of deaths equal to 38.35 per cent. of the former over the latter.

The mortality of children under five years of age as compared with the total mortality was 5,704, or 49.30 per cent. This heavy and frightful mortality during infancy is no more peculiar to our own than to other large cities. Viewed in a sanitary aspect, there is much in this pressure on infant life worthy our consideration.

It is scarcely a matter to be questioned, because acknowledged by all who have investigated the subject, that one of the principal causes for this enormous death-rate of our infant population is the unhealthy condition of the atmosphere we breathe. Nor is it less obvious that the catalogue of diseases to which the deaths among children are assigned, embraces chiefly that class called preventable, or those depending upon local and removable causes.

In Table IV. will be found the record of deaths from Dec. 31, 1859, to June 30, 1860. This period terminated the existence of the system of collecting and recording the deaths and births under the old health law of 1818. It tabulates the number and causes of death, with the sexes, and periods of life when they occurred, for the first six months of the year.

Table V. gives the deaths, under the new law, for the past six months, with the sexes, the adults and minors, as also the several periods of life when the deaths occurred, and the total number deceased for each term designated.

Table VI. furnishes the wards, with the number of deaths in each ward from the several diseases named, together with the deaths from the Alms-house, the country, and those among the people of colour, with the nativity of the deceased. It will be observed that 4,888, or 77 per cent., of those who died were born in the United States, those of foreign birth amounted to 1,096, or 17.28 per cent., and of unknown nativity there were registered 358, or 5 per cent. This table also gives the population of each ward,

together with the ratio of deaths to population, and percentage of deaths in each to the total mortality for six months.

The heaviest mortality according to population was in the Fourth Ward, equal to 1 in every 61; the next highest was in the Second Ward, 1 in 69. In the Seventeenth Ward the rate of deaths stood 1 in 76; in the First Ward 1 in 83; in the Third Ward 1 in 84; and in the Seventh and Nineteenth Wards 1 in 87.

In most of these wards, where the mortality has been the heaviest, an explanation for the high death-rate will be found in the character of a part of the population, the manner in which they live in crowded apartments in narrow streets, blind courts and alleys, amid dampness and filth, without sufficient light and ventilation, badly fed and clothed, and subjected to other defective sanitary arrangements. Whereas, in other wards, where the population was proportionably large, but less crowded, and enjoying more of the comforts and conveniences of life, with an adequate supply of light, and sufficient ventilation, the death-rate was comparatively low. For instance, in the Thirteenth Ward, where the population rated 20,132, there were only 123 deaths, in the ratio of 1 death to every 163, or 2 per cent. of deaths to the total mortality; while in the Fourth Ward, already alluded to, where the population was but 23,633, there were 385 deaths, or 1 to every 61 of its inhabitants, and equal to 6 per cent. of the total mortality! Such is the contrast, in the mortality of our city for the last six months of 1860, between a favourable and unfavourable sanitary district.

Similar comparisons may be instituted between the healthy and unhealthy states of other wards by a reference to the table.

Table VII., Class I. ZYMOTIC or EPIDEMIC DISEASES.—Adopting the classification of diseases as recommended by the American Medical Association, I now refer to those deaths which come under that division called Zymotic, and which have an epidemic, endemic, or contagious character.

By a careful investigation of the death-roll, it will be found that this class of diseases, which depend upon the altered condition of the atmosphere, and upon local causes, either for their existence or their fatality, are among the most active in swelling our bills of mortality. The total number of deaths from this class during the year amount to 2,275, or 22.62 per cent. of the deaths registered from diseases, or 1 in every 5 of the total mortality. Class I. holds, therefore, an important place in the mortality record of our city, furnishing a heavy percentage of the deaths; while at the same time it is capable of demonstration that this form of disease is fostered by predisposing causes which in a great measure are capable of being removed by sanitary police regulations.

In this class will be found those diseases which press heavily on infant life—and they are mostly the result of causes that are local and removable, of an endemic and avoidable origin. The extent of mortality among minors, in this class, over adults, is equal to 362.4 per cent., or more than 4 of the former to 1 of the latter. An improvement in the sanitary condition of our city will diminish the annual death-rate from zymotic diseases. In evidence of the correctness of this opinion, an examination of the record will show that the highest mortality from such diseases has been in our densely populated wards, and those which are not favoured with advantages that have a direct tendency to mitigate the destructive influence of the cause or causes of epidemic and endemic diseases.

Cholera Infantum, a disease peculiar to cities, and confined to the sum-

mer months, destroyed 514 children. The heaviest mortality since the operation of the registration law, July 1st, was in the Nineteenth, Seventh, Fourth, Third, Twentieth, and Seventeenth Wards, in the order in which they are named. It is well known that these wards are overcrowded and contain localities which are badly ventilated, maintain a squalid population, and are peculiarly adapted to invite and determine the onset of disease. Nevertheless, cholera infantum is on the decline in our city; and, while I admit that the deaths from it have increased 26 per cent. over those for 1859, still if the average for the last four years be taken, it will furnish the evidence that I am correct. Nor can this mitigation of a fatal disease among children be attributed so much to an improved condition of the localities where it has been too often a familiar visitant, as to those advantages alluded to in my last year's report, which are afforded the population of our crowded courts and narrow alleys for securing a change of air by means of the numerous city railroad conveyances that safely glide in every direction through our streets, at all hours of the day.

In this connection I embrace the opportunity of expressing my thanks, as a sanitarian, to our city authorities for the liberal measures they have devised to improve the several grounds at Fairmount, more particularly those of Lemon Hill and Sedgely Park. As a public provision for the security of the health, as well as for the enjoyment of the masses, these pleasure grounds cannot be too highly prized. With the facilities for reaching them from all points of the city, that portion of our population whose circumstances restrict them to a residence in crowded and pent-up localities, where the air does not circulate in its purity, have herewith afforded them a healthful resort. Here wornout wives and enfeebled children can enjoy a pure atmosphere during summer's heat, and pass away hours watching the romantic Schuylkill, as its silvery stream winds along the western slope of the park, or strolling through shaded groves and walks adorned with luxuriant foliage. The establishment of these parks for the people is a great sanitary movement on the part of the authorities, but it is not sufficiently appreciated by the community. What by many is considered to be a lavish waste of public funds in appropriations for the embellishment of these great lungs to the city, is, if rightly viewed, a public saving—a gigantic sanitary protection against the inroads of pauperism—a check upon sickness among the working classes; it becomes indirectly a benevolent provision for the security of the public health, and thus adds to the vital prosperity of our population.

In my report for 1859, I intimated the existence of indications that before a great while we might have to combat with diphtheria—a prognostication that has to a large extent been realized during the year 1860, the deaths having amounted to 307. This mortality, as shown by the record, has observed a gradual increase for each successive quarter, as follows: 1st quarter, the deaths were 36; the 2d, 57; the 3d, 75, and the 4th, 139. During the last six months of the year, the heaviest mortality occurred in the first four wards of the city, amounting to 49. The 18th, 19th, and 20th wards furnished 43 deaths, the 14th and 15th wards added 28, while the 7th ward gave 11 deaths. These wards are densely populated, and in all of them may be found locations peculiarly adapted to the propagation of epidemic diseases, from their low hygienic condition. At the same time, it is but proper to state that cases of diphtheria, and many of them resulting in death, have been quite prevalent in the more salubrious, ele-

vated, and well ventilated sections of the 14th and 15th wards, where it would be less likely to spread through infection or contagion.

Of the deaths recorded for the whole year from diphtheria, 142 were males, and 165 females, an excess of 16.33 per cent. of females. Among adults, there were only 12 deaths, the remainder, 295, were under twenty; of these, 37 were under 1 year; 56 between 1 and 2 years; 116 between 2 and 5 years; 68 between 5 and 10 years, and 18 between 10 and 20 years. The heaviest mortality was in children between 2 and 5 years of age, equal to 164.6 per cent. of the deaths from diphtheria.

Both the character and treatment of diphtheria have been subjected to a wide difference of opinion in medical circles during the past few years. The manner of its propagation—whether by direct contagion, or infection through an aerial poison; whether it can be conveyed by the clothes of an individual visiting a diphtheritic patient; whether it is epidemic, endemic, or sporadic; whether it is a new or old disease; whether it is scarlet fever or croup, or whether a disease of a specific origin, or of the blood, or one of local inflammation—has been frequently discussed. Some view it as scarlet fever, while others look upon it as croup.

That it bears a close resemblance to both of these diseases, cannot be denied; but I am far from believing that diphtheria, as it appeared in our city during 1860, is identical with either the one or the other. When I have witnessed fatal cases of the disease without the croupal cough, or laryngeal inflammation; when I have seen a child die of diphtheria that, one year previously, had scarlet fever in its most malignant form; and when I have seen both scarlet fever and diphtheria side by side in two children of the same family, presenting no identity, except in their fatal termination in a few days, exhibiting in the one case the laryngeal diphtherite, and in the other the true characteristics of congested scarlet fever, of a most malignant type, I am sure not to err, if I decide that they are not the same disease.

I am aware of the close resemblance between diphtheria and scarlet fever, and I am sensible, also, that in expressing an opinion as to the specific nature of the former to that of the latter, I am running a tilt against the judgment of high authority. That the close analogy of the two diseases, and their occasional complications, may lead to error in diagnosis, I can readily admit, and believe that one has often been treated for the other; and where the two diseases prevail simultaneously—as they have done during the year 1860—much confusion may arise, in designating their true character, especially where many of the symptoms differ but slightly. Nevertheless, there is a distinct line of demarcation by which the identity of diphtheria can be recognized.

I have at the present time a grave case of diphtheria under treatment. The fauces, the pituitary membrane, the pharynx, and œsophagus, were all affected with inflammation, as far as could be seen with the eye, followed by an exudation of a grayish-white lymph, accompanied with epistaxis, and an asthenic condition of the system. It is now in the third week, and although the patient is slowly recovering, there is extreme prostration of the vital powers, amounting almost to paralysis, particularly of the organs of deglutition, which, by some authors, is looked upon as a pathognomonic symptom of diphtheria; yet in this family, where there are seven children, only two of whom have had scarlatina, not a case, up to this date, has occurred of either disease, although the surrounding circumstances would lead to the inference that if it were scarlatina, or even a contagious disease, one or more of the family would have been attacked.

I have no belief, therefore, in its contagious character. As an epidemic, the disease may be communicated through an atmospherical poison. Nor am I willing to convey the idea, that in my practice, I should act as if it were contagious. Passing through numerous cases of the disease during the year, I have not observed a single instance wherein a *materies morbi* was developed, that reproduced itself.

If diphtheria does bear an analogy to croup in the fact of an adventitious membranous deposit upon a mucous surface, it is well authenticated that this formation commences in the fauces, and may extend to the larynx, while that of croup invariably shows itself, and is confined to the larynx and trachea. Diphtheritic croupal symptoms are secondary, or accidental, while, according to Dr. Pepper, laryngeal or true croup is a primary affection. I have no question as to the distinct character of the two diseases.

The treatment of diphtheria has been the subject of much diversity of opinion. It is, however, almost unanimously conceded that both a local stimulative and a sustaining treatment is required from the very commencement of the attack, especially in those forms of the disease that have appeared in our city, where an asthenic condition was a marked characteristic.

Scarlet fever has been very prevalent during the year. The deaths amount to 591; this is an increase over those for 1859 of 359, or 154 per cent., and furnishes a considerable item for the increase of the year's mortality, especially during the last six months, over that of 1859. Since the 1st of July, the first four wards, the 7th and 19th, have furnished 55 per cent. of the deaths for the six months. The character of the population, in many parts of these wards, their crowded and defective sanitary condition, to which I have already alluded, will explain the wide-spread prevalence of the disease, and its fatality in those sections of the city.

Smallpox has been on the increase during the year; 57 deaths have been recorded. Of these, 43 were in the last quarter. Nearly all of them, that is, 50 to 7, were in children. 15 of these deaths occurred in the 17th ward; 5 in the 1st, and 6 in the 4th ward; the remainder were scattered over nine of the remaining wards. The disease has been quite prevalent in the 17th ward, where it first made its appearance.

It is a fortunate circumstance that the new ordinance for public vaccination has been in operation during the last six months, in which period 3032 children have been reported as successfully vaccinated. Hundreds of these children would otherwise have met with an untimely death, especially in the 17th ward, where 558 were vaccinated. Nor is it presumptuous to say that, to the neglect of the proper administration of this prophylactic, both on the part of the public authorities for a number of years, and of those parents who refuse to have their children vaccinated, must be attributed the amount of smallpox prevailing in our city at this time. On this subject, I cannot do better than to repeat the views expressed by me in another place, on the gratifying improvement in the system of public vaccination. Believing it to be only one step forward, I have remarked—and every intelligent medical man will surely indorse the sentiment—that “a still higher standard, embracing more adequate provision, is demanded, before a perfect report of the successful state of vaccination in our city can be exhibited. The ordinance now in force is purely benevolent in character, and strictly voluntary in its import. It offers gratuitous vaccination to every individual, and provides an easy method to secure the gift. Unfortunately, however, what with apathy and indifference with some, and prejudice on the part of others, this inestimable sanitary blessing is too often

refused, to render it an entire security against the introduction of small-pox.

“What we require, is a compulsory system, under legal enactment, imposing a penalty for disobedience to its provisions, requiring every child born, or brought into the city, to be vaccinated, and making it an imperative obligation that satisfactory evidence of vaccination shall be given as a prerequisite for admission of children into our public schools. This law, in order to operate effectually, should apply to our entire State.”

The deaths from enteric or typhoid fever were 213, and they have fallen off 20 per cent. from those of 1859. The miasmatic fevers recorded are so limited in number as not to require any special notice, further than the remark that, for the last few years typhoid fever, from its prevalence, seems to have become the ordinary endemic of the city instead of miasmatic fevers.

Measles, among the exanthemata, has fallen off 73 per cent., only 15 deaths having been recorded.

Dysentery furnishes 178 deaths; it has increased 38 per cent. over those for 1859.

Four deaths from cholera, and 24 from cholera morbus are recorded. The four deaths from cholera were in the third quarter; three of them occurred in the Seventh, Tenth, and Nineteenth Wards.

A single death is registered Typhus Icterodes or Yellow Fever. This case was in the month of September, in the person of a German labourer, about 40 years of age, residing in a German boarding-house on Front near Coates Street. He was employed in unloading rafts at Green Street wharf, and had not been absent from his work the whole season. Throughout the entire week he laboured in the docks during all stages of the tides, and the hottest hours of the day, subjected to wet feet, and exposed at low tide to the offensive and noxious exhalations emanating from the mud and filth of these unhealthy localities. The case occurred under circumstances that forbid the possibility of referring it to a foreign origin. It was a sporadic instance, from a local cause, terminating fatally on the 8th day from the attack. No other case occurred in the neighbourhood. Of its being genuine yellow fever not a doubt was expressed by any one who saw it, and the post-mortem revelations confirmed the diagnosis.

Table VII., Class 2. GENERAL OF UNCERTAIN SEAT.—The deaths from diseases of this class, or those whose seat is of variable, uncertain, or doubtful location, amount to 1656. Debility, which is only a condition of the system the result of disease, having no definite meaning, and should seldom if ever be applied as the cause of death, furnished 538 of the number; while marasmus, otherwise atrophy, and having a very general meaning in death certificates, gave 478—making up 1016, or 61.3 per cent. of the deaths in this class.

Table VII., Class 3. DISEASES OF THE NERVOUS SYSTEM.—They number 1,966; of these, 980 were in the first six months, under the old law, and 986 in the last six months, under the new law. They constitute 19.5 per cent. of all the deaths from registered diseases.

1,240, or 63 per cent. of the deaths in this class, were in children under 10 years of age; of these, 513 are recorded under convulsions, and 266 from inflammation of the brain.

Apoplexy and palsy, two diseases which almost invariably are related as cause and effect, produced 273 deaths; the former 143 and the latter 130.

The increase over those for 1859 is 41 per cent. 157 of the deaths were recorded as disease of the brain; but what particular disease, whether epilepsy, dropsy, inflammation, or mania, is not given.

22 deaths are reported from epilepsy—13 males and 9 females. Contrary to some authorities, the excess is with the males.

Table VII., Class 4. DISEASES OF THE ORGANS OF RESPIRATION.—The deaths under this head foot up 2,975—a higher number by 20 per cent. than the deaths from zymotic diseases.

The deaths from consumption alone amount to 1,622, or 55.6 per cent. of the whole class. For the first six months, under the old law, the deaths from diseases of the organs of respiration exceeded those for the last half of the year, under the registration law, by 337, or 25 per cent. The excess of deaths among males from this class was 89—equal to 6 per cent.

The deaths from inflammation of the lungs were 502. In the two last quarters of the year, under the new law, they amounted to 191. Of these deaths 81 were in the first seven wards of the city. The Second Ward yielded 21 deaths, the Seventh 17, and the Fourth 16. These wards are more unfavourably arranged and populated for the security of health than any other wards in our city.

The deaths from consumption, viz., 1,622, are nearly 8 per cent. above those for 1859, and a fraction below those for 1857 and 1858.

Of the sexes, the excess of deaths is on the side of females—say 6 per cent. As usual, this disease is the cause of a heavy amount of our mortality, constituting 16 per cent. of all the deaths from registered diseases. To the population, according to the last census, they are as 1 to every 350, or 2.85 in each thousand.

The decade of life between 20 and 30 contributed the highest number of deaths, viz., 538, or 33 per cent. The heaviest monthly mortality for the year appears to have been in February, 176; while November gave the least, viz., 106. The previous year November rated the highest.

Of those deaths registered since July 1st, viz., 792, 419, or 53 per cent., were native born, and 285, or 36 per cent., were of foreign birth. Of the remaining number the nativity was not given.

Of the wards during the above period, the Seventh, a densely populated ward, contributed the heaviest mortality, viz., 48; the Second and the Nineteenth each 45; the First Ward 39, and the Fifth 37; the Twenty-first, a rural ward, gave only 14 deaths; the Twelfth furnished 15; the Eleventh and Thirteenth each 16. These three wards contain a medium population, while the Thirteenth rates the healthiest in the built-up portions of the city, and is equal in salubrity, according to the register for the last six months, to the Twenty-first or rural ward.

As alluded to in my former reports, croup is steadily on the increase. During the year 354 deaths have been recorded from this enemy to childhood—an increase of 42, or 13 per cent. over those for 1859. It furnished 16.60 per cent. of the diseases of the organs of respiration. The highest number occurred in the first quarter, embracing the colder months, amounting to 127. The lowest number was in the third quarter, viz., 46.

Table VII., Class 5. ORGANS OF CIRCULATION.—The diseases belonging to this class contribute 350 deaths to the annual mortality—166 males and 184 females.

Under the general term Disease of the Heart there are 287 deaths registered, making 79 per cent. of the total. Of these 135 were males and 152

females. The remaining number, 63, specify the particular name of the cardiac affection, from which death occurred.

Table VII., Class 6. **ORGANS OF DIGESTION.**—The deaths from the organs of nutrition amount to 582, or 5 per cent. of the mortality for the year—310 males and 272 females. The highest number of deaths are returned in the third quarter, viz., 209. The first quarter gave only 100 deaths. The most prominent disease in the catalogue is inflammation of the stomach and bowels, which returns 279 of the deaths. Inflammation of the liver caused 73 deaths.

Table VII., Class 7. **DISEASES OF THE URINARY ORGANS.**—This class of diseases caused 80 deaths in the year; of which 50 were males and 30 females. 43 of these deaths were under the general term Disease of Kidneys.

Table VII., Class 8. **ORGANS OF GENERATION.**—The diseases belonging to the generative system claim to have given 112. All of them except 3 were among adult women. Puerperal fever contributed 47—nearly one-half the deaths. The first quarter of the year gave 22, and the second 13 deaths. During the last six months there were only 12 deaths. Cancer of the uterus supplied 41 deaths—less by 11 than those for 1859.

Table VII., Class 9. **ORGANS OF LOCOMOTION.**—This class returned 55 deaths. Of these 22 were from rheumatism, and 26 from disease of the spine.

Table VII., Class 10. **THE DISEASES OF THE INTEGUMENTARY SYSTEM** gave only 2 deaths during the year—1 from eczema and 1 from elephantiasis.

Table VII., Class 11. **OLD AGE** foots up 213 deaths, 73 males and 140 females. As in all vital statistics, the excess of longevity is on the side of females. In this instance 91 per cent. were females. 19 of the deaths were between 90 and 100 years of age, and 4 were over 100 years.

Under this head, "Old Age," is to be found a convenient hiding-place for the difficulty ascribed by some in securing a true diagnosis of the diseases of aged people. The term is entirely without meaning, and for all practical or statistical purposes would answer as well if incorporated under the heading "Unknown," Class 13, which gives 134 deaths, and is another convenient term employed in too many instances, as in the case of "Old Age," to save the trouble of a careful investigation in order to ascertain the true cause of death.

Table VII., Class 12. **EXTERNAL CAUSES.**—The deaths from external, accidental, or violent causes always make up a considerable percentage of the annual mortality. For 1860 they amount to 447, or 4 per cent. of the deaths from all causes.

The great disparity of deaths in this class between the sexes has not escaped observation. Those under consideration show an excess of male deaths equal to 160 per cent. The male deaths were 323; while those in females were but 124. This inequality may be ascribed to the difference in occupation with the sexes, and therefore men are far more exposed to danger than women.

The stillborn (Class 14) children for the entire year, as registered, amount to 719—an increase of 61, or 9 per cent. over those for 1859. This increase will be found in the first six months of the year, rather than in the last semi-annual period under the new law. They constitute 6 per cent. of the annual mortality.

General Abstract of Meteorological Observations, made at Philadelphia, Pa., during the year 1860.
 By JAMES A. KIRKPATRICK, A. M., Prof. of Civil Engineering in the Philadelphia High School.
 (Barometer fifty feet above high water in the Delaware River.)

1860.	THERMOMETER.											BAROMETER REDUCED TO 32° F. But not corrected for altitude.						
	MONTHS.	7 A. M.	2 P. M.	9 P. M.	Mean.	Max.	Min.	RANGE.		Mean of daily oscillations.	7 A. M.	2 P. M.	9 P. M.	Mean.	Max.	Min.	RANGE.	
		°	°	°	°	°	°	°	°								°	°
January	28.89	38.37	32.97	33.41	58	3½	5½	6.5	14.8	29.970	29.915	29.938	29.941	30.399	29.593	.806	.159	
February	27.24	38.07	31.69	32.83	70	1	69	8.8	17.8	29.970	29.885	29.918	29.924	30.358	29.099	1.269	.209	
March	38.15	52.34	43.71	44.73	73	25	48	5.4	18.3	29.829	29.757	29.765	29.794	30.224	29.499	.725	.133	
April	43.96	56.56	47.92	49.48	81	29	52	7.4	18.9	29.849	29.794	29.830	29.824	30.303	29.319	.984	.166	
May	59.66	71.03	61.57	64.09	90	44	46	5.2	17.2	29.828	29.787	29.815	29.810	30.050	29.479	.571	.100	
June	67.70	78.38	69.05	71.71	93	52	41	4.2	18.9	29.757	29.719	29.745	29.740	30.123	29.243	.880	.088	
July	72.60	83.89	74.34	76.91	95½	57	38½	5.0	19.8	29.811	29.774	29.787	29.791	29.979	29.405	.484	.112	
August	70.13	82.87	73.29	75.43	95	55	40	3.8	18.8	29.848	29.813	29.834	29.832	30.026	29.632	.394	.090	
September	60.28	73.17	64.02	65.82	92	42	50	5.2	18.2	30.003	29.965	29.998	29.989	30.313	29.597	.716	.143	
October	51.58	63.29	55.61	56.83	79	36	43	5.8	16.1	29.963	29.906	29.938	29.936	30.275	29.342	.963	.119	
November	43.30	50.53	45.33	46.39	80	16	64	5.5	14.4	29.821	29.773	29.792	29.795	30.305	29.248	1.037	.197	
December	29.32	35.65	31.82	32.26	50	13½	36½	5.0	12.2	29.937	29.911	29.938	29.936	30.418	29.285	1.133	.196	
Annual means	49.39	60.35	52.61	54.12	95½	1	94½	5.6	17.1	29.882	29.833	29.862	29.859	30.418	29.099	1.319	.143	
Winter	28.93	37.64	32.18	32.91	71	1	70	7.9	15.6	29.960	29.902	29.929	29.930	30.399	29.099	1.300	.189	
Spring	47.26	59.98	51.07	52.77	90	25	63	6.0	18.1	29.885	29.779	29.813	29.809	30.303	29.319	.984	.133	
Summer	70.11	81.71	72.23	74.68	95½	52	43½	4.3	19.2	29.805	29.769	29.780	29.788	30.123	29.243	.880	.067	
Autumn	51.72	62.33	54.99	56.35	92	16	76	5.5	16.2	29.929	29.881	29.909	29.906	30.313	29.248	1.065	.163	
For eight years	49.69	59.98	53.19	54.29	100½	—3½	103	5.6	15.0	29.893	29.854	29.877	29.875	30.704	28.884	1.820	.154	

Meteorological Observations—Continued.

1860.	RELATIVE HUMIDITY.										FORCE OF VAPOUR.						WINDS.		CLOUDS. Tenths of sky covered.				DEW-POINT.						
	7 A. M.		9 P. M.		Mean.		Max.		Min.		No. of days on which rain or snow fell.	Monthly resultant; No. of times in 1000.	7 A. M.		9 P. M.		Mean.		7 A. M.		9 P. M.		Mean.		Max.		Min.		
	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	p. c.	inch.	inch.			inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.	inch.
January	80	61	73	71	4	95	24	136	144	143	141	308	040	3351	7	N. 89° 52' W., 402	6.6	6.4	5.1	6.0	23.43	24.99	24.93	24.45	45.8	0	45.8	0	-1.5
February	74	59	72	68.2	100	85	124	154	150	143	434	024	2724	7	N. 61° 52' W., 298	5.3	4.9	4.4	4.9	19.89	24.42	24.79	22.98	55.1	0	55.1	0	-12.6	
March	71	44	61	59.1	97	16	171	175	182	176	497	064	1323	8	N. 79° 17' W., 224	6.1	5.5	4.0	5.2	29.48	28.62	30.69	29.60	58.9	0	58.9	0	8.5	
April	70	50	67	62.5	100	21	210	234	230	225	500	081	3646	15	N. 88° 36' W., 250	5.2	5.9	5.2	5.4	34.21	35.91	36.86	35.66	59.0	0	59.0	0	13.8	
May	76	57	76	69.5	94	28	395	421	420	412	638	224	3589	19	N. 59° 27' E., 070	7.5	6.7	6.5	6.9	51.83	53.54	53.41	52.93	66.0	0	66.0	0	37.4	
June	68	48	67	61.1	94	26	467	464	480	470	804	211	3706	10	N. 67° 23' W., 236	5.9	5.7	3.3	5.0	56.29	56.07	57.01	56.47	72.7	0	72.7	0	35.8	
July	66	43	65	58.4	90	29	539	505	559	534	783	288	8851	10	S. 70° 1' W., 185	5.2	5.9	4.0	5.0	60.02	58.29	61.51	59.94	72.0	0	72.0	0	44.0	
August	77	52	73	67.5	94	27	580	584	603	589	850	275	9260	13	N. 80° 54' W., 150	5.3	5.7	4.8	5.3	62.54	62.57	63.73	62.94	74.4	0	74.4	0	42.7	
September	77	50	72	66.5	93	35	425	437	455	439	822	161	2907	7	S. 74° 26' W., 397	6.2	5.0	3.5	4.9	52.85	53.14	54.60	53.53	73.4	0	73.4	0	29.2	
October	80	61	77	72.8	95	41	321	363	354	346	639	172	4685	13	S. 75° 58' W., 069	6.4	6.2	5.0	5.9	45.56	48.64	48.33	47.51	66.0	0	66.0	0	30.8	
November	76	57	71	68.2	93	35	234	228	236	233	568	058	6037	12	N. 81° 25' W., 333	6.4	6.1	4.8	5.8	36.17	35.21	36.44	35.94	62.6	0	62.6	0	6.5	
December	79	66	73	72.5	92	38	132	140	134	135	275	056	3301	8	N. 51° 45' W., 411	6.4	6.9	4.8	6.0	23.67	24.99	24.00	24.22	42.7	0	42.7	0	5.6	
Annual means	75	54	71	66.5	100	16	311	321	329	320	850	024	45400	129	N. 79° 43' W., 219	6.0	5.9	4.6	5.5	41.33	42.19	43.03	42.18	74.4	0	74.4	0	-12.5	
Winter	77	63	74	71.3	100	24	136	156	150	147	551	024	9535	24	N. 67° 50' W., 289	6.3	6.3	4.8	5.8	22.47	25.55	25.09	24.36	61.7	0	61.7	0	-12.5	
Spring	73	50	68	63.7	100	16	259	277	277	271	698	064	8558	42	N. 76° 26' W., 119	6.3	6.0	5.2	5.8	38.51	39.36	40.32	39.40	66.0	0	66.0	0	8.5	
Summer	71	48	68	62.3	94	26	529	518	547	531	850	211	13817	33	N. 82° 27' W., 165	5.5	5.8	4.0	5.1	59.61	58.98	60.76	59.78	74.4	0	74.4	0	35.3	
Autumn	78	56	74	69.2	95	35	327	343	348	339	822	058	13649	32	S. 84° 34' W., 254	6.3	6.5	5.8	6.4	44.86	45.66	46.46	45.66	73.4	0	73.4	0	6.5	
For eight years.	76	58	72	68.9	100	13	327	345	347	340	1059	013	44692	126	N. 74° 51' W., 215	5.9	6.0	4.4	5.4	43.71	43.71	43.71	43.71	79.7	0	79.7	0	-16.5	

TABLE I. BIRTHS.—Table of Births for Six Months under the new Law of Registration, from July 1st to December 31st, 1860, with the Wards, Sexes, and Colour designated, and with Percentage and Ratio of Births to Population for each Ward.

MONTHS.	WHITE.		BLACK.		STILLBORN.		WARDS.												
	M.	F.	M.	F.	M.	F.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
July.	789	710	5	10	..	..	112	79	47	50	31	37	78	34	44	50	47	44	46
August.	816	759	15	7	..	..	93	70	54	74	53	35	81	44	28	55	45	40	50
September.	734	668	15	4	..	..	67	67	66	57	33	35	65	28	26	41	45	55	33
October.	734	640	11	16	..	..	94	73	43	57	47	42	55	22	34	41	42	49	63
November.	593	642	19	13	..	..	61	68	37	62	41	26	51	33	27	43	54	38	50
December.	658	589	17	16	..	..	70	53	44	57	29	39	31	23	26	39	53	47	46
Total.	4,428	4,008	82	66	208	139	497	408	291	357	231	214	361	184	185	269	286	273	288
Population of each ward.	.		.		.		37,078	23,097	19,976	23,633	24,885	14,928	31,397	27,811	17,215	21,967	16,717	16,811	20,132
Percentage of births to population.	.		.		.		1.34	1.76	1.45	1.15	0.90	1.43	1.14	0.66	1.07	1.22	1.71	1.62	1.43
Ratio of births to population.	.		.		.		74.60	56.61	68.81	66.19	106.34	69.75	86.97	151.14	93.05	81.66	58.41	61.59	69.90

MONTHS.	WARDS.													Total.	Twins.	Triplets.
	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.				
July.	60	71	52	97	40	104	103	41	54	60	64	39	1,409	10	..	
August.	69	81	71	74	63	101	89	52	44	45	45	59	1,575	15	..	
September.	59	76	52	80	50	111	93	33	42	43	77	20	1,402	7	..	
October.	58	68	53	69	45	110	80	37	43	57	56	9	1,374	5	..	
November.	70	80	50	70	52	111	77	40	39	49	69	10	1,337	9	1	
December.	61	65	49	57	52	86	85	34	34	38	78	18	1,247	11	..	
Total.	377	441	327	456	302	623	627	237	256	312	426	155	8,434	57	1	
Population of each ward.	24,336	32,431	20,092	23,328	20,480	39,271	30,152	17,164	17,286	24,093	23,781					
Percentage of births to population.	1.54	1.35	1.62	1.95	1.47	1.58	1.74	1.38	1.48	1.23	1.79					
Ratio of births to population.	64.55	73.53	61.44	51.15	67.81	63.03	57.21	72.46	67.52	77.22	55.82					

TABLE II. MARRIAGES.—*Number of Marriages Registered under the new Law of Registration, from July 1st to December 31st, 1860; with the Nativity of the Brides and Grooms.*

BIRTHPLACE OF GROOMS.	BIRTHPLACE OF BRIDES.			Total of grooms.
	United States.	Foreign.	Not given.	
United States . . .	999	125	14	1,138
Foreign	220	801	4	1,025
Not given	14	10	123	147
Total of brides . . .	1,233	936	142	2,310

TABLE III. MARRIAGES.—*Ages of Persons Married, and Recorded for Six Months, under the new Registration Law, from July 1st to December 31st, 1860.*

AGES OF THE MALES.	AGES OF THE FEMALES.								Total of the males.
	Under 20	20 to 25	25 to 30	30 to 40	40 to 50	50 to 60	60 to 70	Age not given.	
Under 20	7	2	...	...	...	...	...	1	10
20 to 25	320	443	54	9	2	...	...	6	834
25 to 30	102	354	143	32	2	...	...	2	635
30 to 40	29	127	143	118	7	1	...	8	433
40 to 50	2	13	24	44	22	2	...	...	107
50 to 60	...	2	4	12	7	4	...	...	29
60 to 70	1	2	...	2	7	4	2	...	18
Age not given	3	5	1	...	...	...	...	235	244
Total of females } }	464	948	369	217	47	11	2	252	2310

TABLE V.—Deaths for Six Months, under the new Law of Registration, from July 1st to December 29th, 1860.

DISEASES.	SEX.				AGES.											ADULTS.	MIXONS.	TOTAL.				
	Males.	Females.	Boys.	Girls.	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.				70 to 80.	80 to 90.	90 to 100.	100 to 110.
Abscess	12	10	5	12	5	1	1	1	1	1	5	2	3	1	2	1	1	1	1	14	17	31
" of liver	2	5	1	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	5	7
Albuminuria	4	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	2	6
Anemia	1	4	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4
Aneurism	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	6
Aphthae	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	6
Apoplexy	49	32	6	3	7	1	2	1	1	1	4	13	10	15	19	7	4	1	1	72	9	81
Asthma	10	8	10	8	17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	18	36
Cancer and scirrhus	8	5	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	11	2	13
" of the breast	11	15	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	22	2	24
" " liver	3	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	12	1	13
" " stomach and bowels	13	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	22	1	23
Casualties	75	13	29	11	10	5	5	6	8	3	13	13	9	5	7	1	1	1	1	48	40	88
Burns and scalds	11	25	9	18	2	3	10	6	1	5	2	3	1	1	1	1	1	1	1	9	27	36
Drowned	70	7	25	4	1	2	11	9	6	13	18	10	5	2	2	1	1	1	48	29	77	
Exposure	6	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	8	
Fracture	5	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	12	15	
Neglect and want	5	10	3	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	4	
Poisoning	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	2	11
Suicide	10	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	8
Violence	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4	4	8
Caries	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	6
Cholera	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	6
" infantum	244	212	244	212	340	103	12	1	1	1	1	1	1	1	1	1	1	1	1	456	456	912
" morbus	11	10	4	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	7	21
Congestion of the brain	74	63	45	43	36	20	18	9	3	2	11	14	9	6	5	3	1	1	1	49	88	137
" " liver	24	23	16	18	2	3	2	2	1	1	1	1	1	1	1	1	1	1	1	22	25	47
" " lungs	374	418	42	72	13	10	8	10	17	56	270	165	115	70	39	13	5	1	1	678	114	792
Consumption of the lungs	123	116	115	108	132	49	30	6	4	2	6	4	2	3	1	1	1	1	1	16	223	339
Convulsions	94	51	94	49	15	33	69	26	1	1	1	1	1	1	1	1	1	1	1	2	143	145
" puerperal	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Croup	13	12	13	12	24	1	1	1	1	1	1	1	1	1	1	1	1	1	1	25	25	50
Colic	2	3	2	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5	5	10
Cyanosis	159	149	87	85	155	8	7	1	1	2	6	13	17	10	33	31	19	6	1	136	172	308
Cirrhosis	7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	7	7	14
Coup de soleil	105	109	97	106	25	42	69	54	9	4	5	3	2	1	1	1	1	1	1	11	203	214
Debility	49	47	29	31	38	17	3	1	1	1	1	1	1	1	1	1	1	1	1	36	60	96
Diabetes	51	27	20	16	18	7	5	4	1	1	1	1	1	1	1	1	1	1	1	42	36	78
Diphtheria	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Diarrhoea	49	47	29	31	38	17	3	1	1	1	1	1	1	1	1	1	1	1	1	36	60	96
Disease of the brain	51	27	20	16	18	7	5	4	1	1	1	1	1	1	1	1	1	1	1	42	36	78

TABLE V.—Deaths under the new Law of Registration—Continued.

DISEASES.	SEX.						AGES.											ADULTS.	MINORS.	TOTAL.		
	Males.	Females.	Boys.	Girls.	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.				90 to 100.	100 to 110.
Disease of the heart	52	69	16	25	15	2	3	6	4	11	10	19	7	15	15	11	1	2	..	..	41
" " kidneys	16	13	2	2	2	1	1	1	..	1	3	2	6	4	4	2	1	..	..	..	25
" " liver	6	1	3	..	2	1	..	..	..	1	..	1	1	1	1	1	1	..	..	..	4
" " chest	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
" " lungs	1	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
" " throat	1	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
" " spine	2	5	2	3	1	..	..	2	1	1	1	1	1	..	..	..	..	..	..	..	7
" " spleen	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Dropsy (including abdominal dropsy)	33	40	12	9	1	10	6	6	2	5	4	6	7	11	9	8	2	..	..	..	52
" " of the brain	69	65	68	65	78	36	16	2	..	4	2	5	5	15	9	2	..	..	..	..	133
" " chest	35	26	8	6	1	4	4	4	1	2	4	4	4	15	9	2	..	..	..	..	47
" " heart	13	15	7	5	1	4	5	1	1	2	9	10	6	8	4	6	5	2	..	..	16
Dysentery	73	65	50	38	38	20	22	6	..	2	4	6	8	4	6	5	2	..	..	..	50
Dyspepsia	1	1	1	1	1	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	1
Eczema	17	19	13	16	16	4	6	2	..	1	1	1	3	1	1	1	1	1	1	1	29	
Effusion on the brain	1	1	2	1	1	..	..	1	..	2	1	1	1	1	1	1	1	1	1	1	7
Enlargement of the heart	3	4	2	2	1	..	..	1	..	1	1	1	1	1	1	1	1	1	1	1	4
Epilepsy	1	1	..	..	..	..	..	..	..	1	2	1	1	7	3	1	2	..	..	..	16
Elephantiasis	1	1	..	..	12	2	1	1	..	1	1	1	1	3	1	1	1	1	1	1	17
Erysipelas	18	15	11	6	12	2	1	1	..	1	1	3	3	..	..	..	..	..	..	..	9
Fever	5	4	1	2	1	..	1	1	..	1	1	1	1	1	1	1	1	1	1	1	2	
" " bilious	1	1	1	1	1	..	1	1	..	1	1	1	1	1	1	1	1	1	1	1	1	
" " congestive	1	1	1	1	1	..	1	1	..	1	1	1	1	1	1	1	1	1	1	1	1	
" " enteric	1	1	1	1	1	..	1	1	..	1	1	1	1	1	1	1	1	1	1	1	1	
" " intermittent	3	1	..	..	..	..	..	..	..	2	1	1	1	1	1	1	1	1	1	1	1
" " nervous	..	2	..	..	..	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	1
" " puerperal	12	..	..	..	..	..	..	..	..	7	5	1	1	1	1	1	1	1	1	1	12
" " remittent	4	3	2	1	68	1	1	88	6	2	2	2	2	1	1	1	1	1	1	1	3	
" " scarlet	193	163	196	192	24	199	88	6	2	12	39	15	5	5	5	4	2	..	..	..	385
" " typhoid	68	47	25	15	4	8	11	1	2	4	3	5	2	1	1	1	2	..	..	..	40
" " typhus	14	8	4	4	..	1	1	1	2	4	3	5	2	1	1	1	2	..	..	..	14
Fever, typhus interodes	1	1	..	..	2	..	..	3	..	..	2	1	1	2	1	1	2	..	..	..	7
Gangrene	10	2	4	1	2	..	..	..	..	..	..	..	..	2	1	1	2	..	..	..	5
Gout	12	11	5	4	6	1	1	1	1	3	4	5	1	1	1	1	1	1	1	1	14	
Hemorrhage of the lungs	17	2	1	..	1	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	8
" " stomach and bowels	1	1	..	..	..	1	..	..	..	3	4	1	1	1	1	1	1	1	1	1	9
" " uterus	1	2	..	1	..	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	1
" " ..	..	..	..	..	..	..	..	..	..	1	2	1	1	1	1	1	1	1	1	1	2
Hernia	..	5	4	..	..	..	..	..	..	1	1	1	1	1	1	1	1	1	1	1	3
Hooping-cough	6	11	7	11	10	5	3	1	..	1	1	1	1	1	1	1	1	1	1	1	11	
Inanition	53	34	46	23	66	4	3	1	..	5	1	2	2	2	2	3	3	..	..	..	13
Inflammation of the bladder	5	6	..	..	..	..	..	..	..	1	2	2	2	2	2	1	1	1	1	1	7
" " brain	82	47	70	39	34	29	27	9	3	7	6	6	6	5	2	1	1	1	1	1	29	

TABLE V.—Deaths under the new Law of Registration—Continued.

DISEASES.	SEX.			AGES.											ADULTS.	MINORS.	TOTAL.							
	Males.	Females.	Boys.	Girls.	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.				60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.		
						9	679	364	103	173	563	502	402	325				280	212	125	33	6	2,450	3,894	6,542
Inflammation of the bronchi	20	23	10	12	11	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21	22	43	
“ chest	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ larynx	7	4	5	4	2	4	4	3	2	2	4	4	4	4	4	4	4	4	4	4	2	6	9	11
“ heart	4	5	2	4	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ liver	16	17	4	4	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ kidneys	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ lungs	94	97	56	56	51	19	22	9	3	8	15	16	17	12	7	8	4	4	4	4	7	112	101	191
“ peritoneum	25	24	7	8	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ hip	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ pleura	87	78	51	42	44	16	16	10	3	4	14	17	14	11	10	3	1	2	2	2	4	93	165	272
“ stomach and bowels	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ throat	4	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ uterus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ leg	3	3	3	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Intussusception	6	3	3	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Jaundice	3	3	3	2	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mania	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mania a potu	37	13	16	12	13	5	6	2	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Marasmus	183	134	176	127	213	65	18	6	1	1	5	19	16	7	2	4	2	2	2	2	50	303	327	24
Measles	6	4	6	4	2	3	3	1	1	2	1	1	1	1	1	1	1	1	1	1	24	10	10	10
Old age	28	56	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Neuralgia	35	32	3	5	2	1	1	3	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Palsy	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pyohemia	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rheumatism	6	6	2	3	1	2	2	2	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Scurvy	32	16	24	12	13	5	6	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Smallpox	22	25	21	23	11	8	15	6	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Softening of the brain	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stricture of esophagus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stillborn	208	139	208	139	347	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Syphilis	4	1	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Typhoid fever	13	5	13	5	9	3	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Typhus mesenterica	13	11	13	11	12	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Teething	9	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tetanus	3	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tumours	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ulceration	5	5	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ of the stomach and bowels	4	4	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
“ throat	45	31	23	18	20	6	6	6	2	6	11	7	7	7	5	5	5	5	5	5	36	40	76	2
Unknown worms	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Uremia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	3,401	2,941	2,114	1,780	1,941	634	679	364	103	173	563	502	402	325	280	212	125	33	6	2,450	3,894	6,542		

TABLE VI.—Deaths in each Ward for Six Months—Continued.

DISEASES.	ALMSHOUSE.	PEOPLE OF COLOR.	COUNTRY.	NATIVITY.		WARDS.																																
				United States.	Foreign.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	UNKNOWN WARDS.								
																															Unk'n.							
Inflammation of bronchi.	..	5	2	4	2	1	5	1	..	6	1	..	2	1	..	1	1	2	..	..	6	..	..	2	2	..	1	1	1	..	2						
" chest.	..	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" larynx.	..	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" heart.	..	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" liver.	3	1	..	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" kidneys.	..	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" lungs.	10	20	5	148	32	11	21	10	16	4	3	17	7	5	7	8	3	4	3	6	6	6	8	4	9	3	2	4	15	6	5	1	..	..		
" peritoneum.	..	1	1	23	24	2	2	1	4	2	4	4	1	1	2	1	2	1	1	1	1	1	1	1	2	5	2	1	2	2	2	2	2	2	2			
" hip.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" pleura.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" stomach & bowels.	4	5	5	130	27	8	17	9	5	8	6	2	8	7	5	3	3	9	2	2	8	4	6	5	12	8	5	2	9	9	6	6	6	6	6	6		
" throat.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" uterus.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" leg.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Intussusception.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jaundice.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mania.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mania a potu.	3
Marasmus.	13	24	1	308	13	6	20	17	6	20	16	9	12	6	9	8	6	6	8	9	13	15	24	13	36	11	13	8	10	26	5	1	..	..	..	..	..
Measles.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Old age.	3	2	1	44	35	5	3	..	1	3	3	2	8	2	8	1	3	1	3	1	2	4	3	5	4	3	5	6	2	1	6	3	..	..	..	..	..
Neuralgia.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palsy.	3	2	1	44	35	5	3	..	1	3	3	2	8	2	8	1	3	1	3	1	2	4	3	5	4	3	5	6	2	1	6	3	..	..	..	..	..
Pyemia.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatism.	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scrofula.	3	2	1	40	3	5	4	3	2	1	2	1	1	2	1	3	4	1	1	1	2	3	2	1	1	2	3	1	1	1	1	1	1	1	1	1	1	
Smallpox.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Softening of the brain.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stricture of oesophagus.	1	10	1	346	1	23	14	16	27	12	13	19	11	6	17	13	17	5	11	16	16	12	8	19	14	1	4	12	10	30	..	..	..	..	..	..
Stillborn.	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Syphilis.	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tabes mesenterica.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teething.	1	1	1	3	7	2	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tetanus.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tumours.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ulceration.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" of stomach & bowels.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" throat.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Unknown.	7	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Worms.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Uremia.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.	256	306	131	4888	1096	358	448	332	237	355	232	150	358	190	182	214	182	156	123	195	283	194	307	217	452	261	122	147	187	433	224	..	..	..	..	..

TABLE VII.—Classified Mortality for the year 1860—Continued.

DISEASES.	JAN.		FEB.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPT.		OCT.		NOV.		DEC.		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
CLASS II.—UNCERTAIN OR GENERAL SEAT SPORADIC DISEASES—continued.																										
Gangrene	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	20
Gout	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
Hectic fever	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6
Hemorrhage	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Inflammation of leg	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	38
" throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Inanition	10	9	7	4	3	1	5	9	7	9	8	4	11	7	10	7	6	5	14	8	6	3	6	4	163	
Maramus	10	9	11	13	6	13	11	11	9	17	24	17	50	41	58	37	30	22	15	14	7	16	12	4	478	
Malformation	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Mortification	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Scrofula	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
Sore throat	1	7	5	5	2	1	3	2	1	3	2	6	5	9	3	3	1	2	3	5	3	5	3	7	1	71
Tabes mesenterica	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
Tumours	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	26
Ulceration	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
" of throat	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5
Total	59	46	64	55	35	50	57	53	49	63	61	49	108	96	123	99	80	57	95	89	65	59	82	62	1656	
CLASS III.—NERVOUS SYSTEM.																										
Apoplexy	6	4	5	12	5	3	5	5	10	5	4	3	6	4	12	3	6	4	10	7	9	3	6	11	143	
Congestion of the brain	5	8	12	5	14	9	11	7	16	9	11	10	9	11	10	9	15	9	11	10	9	6	7	11	254	
Convulsions	16	18	29	31	28	16	18	25	21	21	24	27	22	21	28	24	15	22	26	18	19	15	13	16	513	
Coup de soleil	7	5	7	8	7	5	6	6	12	3	3	3	10	11	11	11	7	7	13	7	1	4	8	3	2	
Disease of the brain	16	6	15	5	14	7	13	9	8	7	7	6	17	26	15	19	10	6	10	10	8	1	9	3	157	
Dropsy of the brain	1	2	1	9	4	4	1	1	1	3	5	3	2	1	6	8	2	2	2	6	1	1	3	1	217	
Epilepsy	1	2	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	1	1	3	1	76	
Inflammation of the brain	11	14	21	16	10	10	13	8	9	5	12	8	18	10	26	14	7	1	11	9	11	8	9	5	222	
Mania	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	
Mania à potu	8	1	2	1	11	3	10	5	9	5	10	2	6	4	6	1	5	1	12	3	3	3	5	4	117	
Neuralgia	5	8	8	5	4	4	7	4	3	7	4	6	6	6	6	5	4	3	8	7	9	6	2	5	130	
Palsy	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	
Softening of the brain	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	6	
Tetanus	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21	
Total	76	68	103	97	100	61	95	66	86	71	85	71	99	97	139	95	75	54	106	77	73	49	66	67	1966	

TABLE VII.—Classified Mortality for the year 1860—Continued.

DISEASES.	JAN.		FEB.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPT.		OCT.		NOV.		DEC.		TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
CLASS IV.—DISEASES OF THE RESPIRATORY SYSTEM.																										
Asthma	1	1	2	3	2	1	1	1	2	2	3	3	1	1	1	2	1	1	3	3	3	2	2	3	3	32
Congestion of the lungs	7	4	13	9	5	4	12	2	11	5	4	5	4	1	3	7	1	3	3	8	6	3	6	4	129	
Consumption of the lungs	59	60	96	80	69	70	59	64	72	56	55	66	64	56	59	66	59	66	78	49	61	66	76	6	1622	
Croup	25	15	32	27	18	10	19	13	16	12	14	8	10	8	4	9	7	22	10	24	12	21	10	354	1	
Disease of the lungs . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
“ chest . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Dropsy of the chest	6	8	4	12	8	3	9	6	8	10	6	7	11	10	14	7	4	3	2	1	1	1	1	3	148	
Hemorrhage of the lungs	2	4	2	4	1	2	4	2	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	27	
Inflammation of the bronchi	10	7	5	8	7	5	4	4	4	4	4	4	4	4	4	2	2	1	3	5	3	8	7	107		
“ chest . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
“ larynx	1	3	2	2	5	2	3	1	3	4	1	1	1	1	1	1	1	1	2	1	2	2	2	2	38	
“ lungs	37	34	36	28	22	13	28	20	35	23	16	19	8	17	14	12	16	11	27	20	13	7	16	30	502	
“ pleura . . . . .	..	1	3	1	..	..	..	2	..	1	1	..	..	..	1	..	..	..	..	..	..	..	1	..	13
Total	148	137	195	174	118	110	135	111	146	157	102	103	99	92	131	120	90	87	132	124	93	94	123	134	2975	
CLASS V.—ORGANS OF CIRCULATION.																										
Aneurism . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Disease of the heart	14	12	25	18	13	15	13	8	12	17	6	13	7	19	13	9	9	9	2	10	11	11	11	11	287	
Dropsy of the heart	2	1	1	2	..	..	..	..	1	..	..	..	1	..	5	1	4	6	2	4	2	1	1	3	85
Enlargement of the heart . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Inflammation of the heart . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
Pyæmia	1	..	..	..	..	..	..	..	2	..	..	..	1	..	1	..	1	1	1	..	..	..	..	..	10
Total	17	13	27	20	13	16	14	8	15	17	6	13	9	20	19	10	15	16	9	17	13	14	12	17	350	
CLASS VI.—DISEASES OF THE DIGESTIVE ORGANS.																										
Abscess of the liver . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7
Cancer of the stomach and bowels	1	..	..	1	3	..	..	..	2	..	..	..	2	1	4	6	2	2	..	..	..	..	..	..	29
“ liver . . . . .	..	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	4
Cirrhosis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5
Golic . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Congestion of the liver . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Disease of the liver . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
“ spleen . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7

TABLE VII.—Classified Mortality for the year 1860—Continued.

DISEASES.	JAN.		FEB.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPT.		OCT.		NOV.		DEC.		TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
	CLASS IX.—DISEASES OF ORGANS OF LOCOMOTION.																								
Caries . . . . .	..	5	..	1	..	3	..	1	..	1	..	1	..	1	..	1	..	2	..	3	..	1	..	2	4
Disease of the spine . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
Inflammation of the hip . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Rheumatism	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
Total	1	6	3	1	3	..	2	2	5	1	4	2	2	2	1	..	2	1	1	4	2	..	..	5	55
CLASS X.—DISEASES OF INTEGUMENTARY SYSTEM.																									
Eczema . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Eclphantiasis . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Total . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
CLASS XI.—Old Age																									
Total	5	19	18	24	7	14	7	8	8	12	7	7	5	11	8	11	4	7	1	5	5	12	5	10	213
CLASS XII.—FROM EXTERNAL CAUSES.																									
Asphyxia . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	26
Burns and scalds	7	4	4	4	3	5	1	5	3	4	..	1	2	2	..	1	1	1	3	2	2	1	2	3	77
Casualties	6	1	9	3	7	1	5	..	13	4	8	3	16	3	13	4	12	4	25	1	8	4	6	2	147
Drowned . . . . .	..	..	2	2	3	..	5	..	19	..	18	1	13	1	35	3	7	1	9	..	..	..	..	..	128
Exposure . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Fracture	1	..	1	1	..	1	..	..	1	..	..	..	..	..	..	..	1	1	1	1	..	..	..	..	14
Poisoning . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Suicide . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Violence	2	1	..	..	1	..	..	..	3	..	1	..	2	..	1	..	1	1	1	..	..	..	..	..	20
Want and neglect	1	..	1	2	..	1	1	1	..	..	..	..	2	4	1	..	1	2	1	1	..	..	..	..	4
Strangulation . . . . .	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
Total	17	6	17	13	14	9	14	6	39	11	29	7	37	13	51	12	24	9	41	12	22	17	18	9	447
CLASS XIII.—UNKNOWN																									
Total	4	4	7	6	9	4	5	1	3	6	4	5	5	5	14	8	9	5	7	10	5	2	5	1	134
CLASS XIV.—STILLBORN																									
Total	28	27	41	39	26	25	27	24	37	35	33	30	25	23	30	26	36	18	37	31	40	19	40	22	719

TABLE VIII.—Mortality in each Ward, with the Population, according to the late Census, with the ratio of Deaths to Population, and the Percentage of Deaths in each Ward to the Total Mortality.

WARDS.	Population last census.	Deaths.	Deaths to population.	Per cent. of deaths to total mortality.
First	37,078	448	1 in 83	7.07
Second	23,097	332	1 " 69	5.23
Third	19,976	237	1 " 84	3.71
Fourth	23,633	385	1 " 61	6.06
Fifth	24,858	232	1 " 107	3.65
Sixth	14,928	150	1 " 99	2.36
Seventh	31,397	358	1 " 87	5.64
Eighth	27,811	190	1 " 146	3.
Ninth	17,215	182	1 " 94	3.
Tenth	21,967	214	1 " 102	3.37
Eleventh	16,717	182	1 " 92	3.
Twelfth	16,811	156	1 " 107	2.45
Thirteenth	20,132	123	1 " 163	2.
Fourteenth	24,336	195	1 " 124	3.
Fifteenth	32,431	283	1 " 114	4.46
Sixteenth	20,092	194	1 " 103	3.
Seventeenth	23,328	307	1 " 76	4.84
Eighteenth	20,470	217	1 " 93	3.42
Nineteenth	39,271	452	1 " 87	7.12
Twentieth	30,152	261	1 " 115	4.04
Twenty-first	17,164	122	1 " 140	2.
Twenty-second	17,286	147	1 " 117	2.31
Twenty-third	24,093	187	1 " 129	3.
Twenty-fourth	23,791	190	1 " 125	3.
Unknown . . . .	.....	224	.....	.....
Almshouse . . . .	.....	243	.....	.....
From the country	.....	131	.....	.....
Total for 6 mos.	.....	6,342		
Total population	568,034			
Total mortality for the year		11,568		
Ratio of deaths to population		.....	1 in 51	