San Francisco cancer survey : third preliminary report (fifth and sixth quarterly reports) / by Frederick L. Hoffman.

SAN FRANCISCO CANCER SURVEY

THIRD PRELIMINARY REPORT

(FIFTH AND SIXTH QUARTERLY REPORTS)

HOFFMAN

SAN FRANCISCO CANCER SURVEY

THIRD PRELIMINARY REPORT

(Fifth and Sixth Quarterly Reports)

By
FREDERICK L. HOFFMAN, LL.D.,
Consulting Statistician, Prudential Insurance Company of America
Newark, N. J.

Conducted under the auspices of the John Hancock Mutual Life Insurance Company, The Pacific Mutual Life Insurance Company, and The Prudential Insurance Company of America.

54178
PRINTED IN U. S. A.
by Prudential Press

TABLE OF CONTENTS

SAN FRANCISCO CANCER SURVEY

INTRODUCTION

The present consolidated report for the Fifth and Sixth Quarters of the San Francisco Survey covers the six months ending with December 31, 1925. A large amount of new material has been examined, tabulated and critically considered as far as the available time and circumstances would permit. Probably more than 20,000 cancer death certificates are now receiving specialized consideration, aside from approximately 1,200 completed questionnaires concerning living cancer patients in San Francisco, Buffalo, Newark, New Orleans and the State of Massachusetts. Progress with so large an amount of data is necessarily slow, but the present publication will add materially to the information now available.

It is thus apparent that what is called the San Francisco Cancer Survey has unintentionally developed into a survey of national scope and interest. This has been unavoidable, to supply the uses of comparative or control data, since no similar tabulation or analysis has heretofore been attempted for this country. Of special importance is an arrangement entered into with the Mayo Clinic through the courtesy of Dr. William J. Mayo and Dr. Verne C. Hunt, by which cancer questionnaires are being filled in for me at the clinic and will later be amplified by a follow-up system to provide a check upon post-operative results.

Equally important is a satisfactory arrangement entered into with the State Institute for the Study of Malignant Disease, at Buffalo, N. Y., through the kindness of Dr. Burton T. Simpson, of Buffalo. At the Institute a special investigator, Miss Rachel Jenss (Vassar, 1925), is, under my direction, securing information concerning living cancer patients by means of a questionnaire, in a uniform manner with investigations made in other cities and sections. Special attention, however, is being given in Buffalo to matters of diet, fecundity and heredity.

In addition to the foregoing subject, the treatment by radium is receiving particular consideration. This aspect of the investigation, however, is rather involved, particularly as regards after-treatment results, as to which, however, some valuable information should in the course of time be forthcoming. A similar arrangement could be affected with the hospital of the University of California at San Francisco, which has probably the most complete cancer records of any institution in this country, especially as regards gynecological cases.

Aside from the foregoing, and partly as the result of my cancer lectures in Canada, I have been furnished with cancer records for the entire Province of British Columbia, through the kindness of Dr. H. E. Young, Provincial Health Officer. These statistics are now being tabulated for me by a group of students at Boston University, under the direction of Dr. C. E. Carroll. Similar certificates have been promised by the cities of Toronto and Winnipeg and the Provinces of Saskatchewan and Alberta, so that there will be added to the American data in the near future a wealth of information for almost the whole of western Canada.

I may say in this connection that Vancouver and Victoria have the highest cancer death rates. In this respect the Canadian situation conforms precisely to the situation on the Pacific Coast of the United States. An interesting sidelight of the investigation in western Canada will be the facts disclosed for the population of Icelandic origin as well as for the Oriental element living in the Province of British Columbia. Attention will also be given to native Indians living in all parts of the western section of the Dominion.

Certain preliminary results of the cancer survey have been communicated from time to time to the public in lectures, but particularly so in my address before the Philadelphia County Medical Society, November 5, 1925. My Canadian cancer lectures have been reprinted under the titles "Cancer in Canada" and "Cancer Facts and Fallacies," through the courtesy of The Prudential Insurance Company.

The present publication includes a detailed list of the cancer deaths of San Francisco and Boston during the five years ending with 1924, according to streets and house numbers. The tabulation reveals for the first time the extent to which cancer deaths during the period stated have occurred in the same house more than once. This matter is being followed up by special investigations, but only slow progress is being made in this direction, as it is not an easy matter to cover so large a city as San Francisco, and so large a number of houses as are involved, with the required thoroughness in detail. The present indications are that the results in San Francisco are not likely to support the theory of a parasitical origin of cancer or a distribution through infection, or contact from person to person.

The returns for Portsmouth, England, are included as a contribution towards a more comprehensive international comparison, which it is hoped in the course of time will be possible, if the methods adopted in the present investigation are followed elsewhere. The statistical aspects of the cancer problem are now receiving extended consideration on the part of the Cancer Committee of the League of Nations, the Ministry of Health of Great Britain and the Health Departments of Holland and Italy. Unfortunately, European death certificates do not contain all the information which is given on the standard death certificates in use throughout this country. The statistical results of the cancer inquiry by the League of Nations have

just been published in two volumes entitled: "Report of the Results of Certain Clinical Inquiries Relating to Differences of Cancer Mortality in Certain Selected Countries" and "Report of Results of Demographic Investigations in Certain Countries." These two publications are the most notable contributions of their kind that have ever been made to the statistical study of the cancer problem, and, while limited to area and regarding certain organs and parts, they are suggestive of the great practical value of such an investigation when made by those competent to do so.

During the past six months I have given special consideration to the time factor of the disease, or, in other words, its known duration from the time of onset to the time of death. This part of the investigation has not been limited to all forms of cancer collectively, but has been extended to every important form of cancer, with a due regard to sex. The results in this respect are probably the first collective data of their kind ever published on the subject in complete detail. They are extremely suggestive and should be particularly helpful in the furtherance of efforts to bring about a better understanding on the part of the public as well as on the part of the medical profession regarding the supreme importance of the time factor, which has recently been emphasized in an address by Dr. Lazarus Barlow of the Medical School, London.

Questionnaire results are for the present only available in preliminary form and without extended observations. They cover a large amount of material concerning which collective investigations have not heretofore been on a scale proportionate to their importance. The results are decidedly suggestive, but, of course, are subject to the criticism that they represent the viewpoint and opinion of the patient, not verified or verifiable by more scientific methods of research. All of this information should be considered merely as a contribution to the ascertainment of the approximate truth of the present cancer situation rather than as an exact scientific statement of the facts and conditions involved.

The present report includes a series of detailed tables giving the cancer death rates according to sex for forty organs and parts concerning which information has not heretofore been available in similar form. It is strongly felt that this method of detailed analysis is likely to prove extremely useful in ascertaining the causative or contributory factors responsible for an excessive death rate. I cannot on this occasion enlarge upon results, but a few of the more striking facts may be pointed out.

In San Francisco, the male death rate for cancer of the stomach is 45.1 against a female mortality from cancer of the stomach of 21.8. For Boston the corresponding figures are 30.8 for males and 24.6 for females; for Albany, N. Y., 35.2 for males and 23.1 for the females; for Chicago, 33.9 for the males and 23.4 for females. For the white population of New Orleans the figures are 27.3 and 18.8. There are, therefore, important differences in the local rate of incidence of the most important form of cancer which affects both sexes to a variable degree.

Another striking difference are the local variations in the rates for cancer of the uterus. For San Francisco the rate is 33.7 per 100,000 of the female population; for Albany, 30.8; Boston, 30.3; Chicago, 26.0; for the white population of New Orleans, 32.0; and the colored population of New Orleans, 52.9. For cancer of the breast the rates have been as follows: For San Francisco, 26.3 per 100,000 of the female population; for Albany, 29.7; for Boston, 26.0; Chicago, 19.9; for the white population of New Orleans, 8.8; and for the colored population of New Orleans, 16.8. Information of this kind should be of value to the medical profession and suggestive of lines of more extensive specialized research.

Among other facts, the death certificates reveal information as to whether the death was preceded by an operation. In brief, it is shown that of those who died from cancer the proportion who had been operated upon previous to death was 58.7 per 100,000 for San Francisco, 53.6 for Boston, 53.6 for Albany, 44.8 for Chicago, 26.7 for the white population of New Orleans, and only 6.9 for the colored population of New Orleans.

Reference may also be made to the frequency with which autopsies have been reported in cancer deaths in proportion to the population affected. In San Francisco the cancer mortality followed by autopsy for both sexes combined was 19.9 per 100,000; for Albany, 9.5; Boston, 8.0; Chicago 10.2; for the white population of New Orleans, 1.6; and for the colored population of New Orleans, 0.4. The disparity in the results regarding both operative treatment and autopsy disposition is suggestive of further investigation which may possibly be feasible some time in the future.

A widely varying factor in the cancer mortality is the rate at which married women die from cancer in the different cities proportionate to the total female population. For San Francisco the rate was 70.4 per 100,000; for Albany, 75.2; Boston, 67.8; Chicago, 67.6; the white population of New Orleans, 60.5; and for the colored population of New Orleans, only 20.7. It is generally held that there is a definite and traceable relation between child-bearing and cancer of the female generative organs, including the breast, but heretofore the facts in the case have not been presented in sufficient detail to justify definite conclusions. The questionnaires in course of time should yield much additional information and valuable data on this point which cannot be decided upon on the basis of the death certificates alone. My questionnaires give information as to the number of children, with a due regard to the organ or part of the body affected with cancer, and this, in Buffalo in particular, is being followed by a special inquiry to make sure that all the births, living or dead, are properly returned. My own views on this phase of the cancer problem have been largely guided by the recent work on "Cancer and Tumors," by Dr. Hastings Gilford, the author of a standard treatise on Post-Natal Growth and Development.

For the present no new information is forthcoming regarding the frequency of cancer in native races or in the different racial elements in the various cities considered. This is a phase of the problem which is surrounded by many practical difficulties, particularly as regards the correct ascertainment of the living population of corresponding sex and age distribution. I hope, however, in the near future to be able to give more attention to our native Indian population and the corresponding Indian population of western Canada, with regard to which I have recently been furnished with some very valuable information through the courtesy of the Chief Health Officer of the Province of Ontario, Dr. McCullough.*

*See my address on "Cancer in Native Races," Albany, April, 1926. (Prudential Press, 1926.)

FIFTH QUARTERLY REPORT ON THE CANCER INVESTIGATION FOR THE QUARTER ENDING SEPTEMBER 30, 1925

It affords me pleasure to be able to say that a second printed report on the San Francisco Cancer Survey will shortly be available. The report which makes a document of nearly 200 pages has been generously reprinted by The Prudential Insurance Company. It will contain a large amount of entirely new information represented by some twenty-six special appendices. For the statistical tabulations in connection with this matter, which have been very thorough and time-consuming, I am under particular obligations to the John Hancock Mutual Insurance Company.

A third printed report is now in course of preparation. This report will probably contain, among others, appendices on:

(1) Cancer death rates by organs and parts, in accordance to sex, for six or seven representative cities of this country in addition to San Francisco. The rates are the result of a special analysis of nearly 20,000 cancer death certificates. No such comparison has heretofore been made nor have any such data been heretofore available.

(2) An analysis of the cancer mortality of Madison County, N. Y.

(3) Cancer of the breast will be dealt with in a special report based upon the collective life insurance investigations made some years ago but as to which the results have never been published.

(4) A special report will be made on cancer of the buccal cavity, which is attributed to smoking habits.

(5) There will be an appendix to the cancer mortality of San Francisco by streets and possibly by assembly districts of really extraordinary value in connection with discussions of the possible parasitical origin of cancerous infections. I may say, however, that my own personal studies of the situation in San Francisco seem to preclude the possibility that cancer is an infectious or parasitical disease.

(6) Questionnaire results with reference to male cancer patients will be dealt with in the form adopted in the forthcoming printed report for females. I have now not far from 1,000 questionnaires and more will be forthcoming.

(7) The mortality of Boston will be dealt with in an extended form corresponding to the data for San Francisco, Albany and New Orleans, all of which have been published in the First and Second printed reports.

A special worker, Miss Rachel Jenss, is being employed under my direction at the Buffalo Institute for Malignant Diseases and at the expense of the survey. She is working under very definite instructions, subject to

occasional conferences as opportunity requires. She is under the direct supervision of the Director of the Institute, who is deeply interested in the results. She should produce possibly not less than 500 questionnaires in due course of time, fully amplified by hospital notes and personal visits. Special value must be attached to this investigation in view of the unusual conditions, since the Institute deals almost exclusively with cases of malignant diseases, and has on its staff some of the very foremost experts in particular phases of the cancer problem available anywhere in this country.

It also affords me great pleasure to be able to say that the Mayo Clinic has agreed to use the questionnaire in the future, and furthermore to continue the observations for a period of at least five years after the discharge of the patient from the Clinic. This coöperation should prove productive of extremely valuable results in view of the unusual ability and large quantity of clinical and pathelogical material available for the scientific study of cancer cases.

During my Pacific Coast trip I had occasion to interview the health officer of Los Angeles and San Diego with a view of obtaining cancer records of these two cities, which are urgently needed to complete my Pacific Coast investigations. The outlook is favorable that certificates for 1924-1925 will be furnished. Unfortunately the boards of health in question are not in a position to render much voluntary assistance on account of inadequate office force, while I myself am not in a position to offer the required compensation.

In the furtherance of my general cancer studies I have made some investigations of cancer in Canada and on several occasions have addressed Canadian medical audiences as well as the public on the Canadian cancer problem, which has recently been reprinted and published by The Prudential Insurance Company. As the result of my public activities, particularly at Montreal, Toronto, Winnipeg, Regina and Victoria, a large measure of support has been promised, of which it is hoped advantage may be taken in the near future. A Canadian Cancer Survey corresponding to the American Cancer Survey would produce results of really extraordinary value. It is, for illustration, shown by my figures that in Canada, as in this country, the cancer death rate is highest in the cities on the Pacific Coast, or Vancouver and Victoria. The matter has been fully explained to the local authorities, and, as the result of discussions, I have been promised copies of cancer death certificates for Winnipeg and the Provinces of Saskatchewan, Alberta and British Columbia. A like measure of support may be anticipated from Ontario, but for the time being this matter cannot be taken up in view of the unavoidable expense involved in the ultimate tabulation, analysis and critical consideration of the data furnished.

During my Canadian visit I delivered serveral addresses under the general title of "Some Cancer Facts and Fallacies," which has also been

published by The Prudential Insurance Company, and of which copies will be sent with this report.

In view of the foregoing I feel that the outlook for further results is decidedly encouraging. The outstanding result of the investigation thus far is the precise ascertainment of the known duration of the disease previous to qualified treatment. This, in San Francisco, for illustration, is eighteen months, which is certainly twelve months too long for hopeful and encouraging results. To the extent that the public become familiar with this single fact of the cancer situation the outlook for better treatment will be corresponding improved. Another fact of outstanding importance is the comparative rates of frequency for different organs and parts in different sections of the country. This will be dealt with fully in my forthcoming printed report which will make the third in connection with the present investigation.

It may not be opportune for me to point out that the recent discoveries in England as regards an alleged cancer parasite have no practical bearing upon the present lamentable cancer situation. They cannot be applied to any practical purpose in the furtherance of the campaign for the control of cancer or, in other words, the better education of the laity and the medical profession as regards measures of early treatment and more hopeful results. The questionnaire method, however, is yielding data that may prove of preventive value, particularly as regards dietary errors and the inherent risk of excessive habits of smoking with particular reference to cancer of the buccal cavity, the throat and the oesophagus.

F. L. H.

Newark, N. J.,
September 30, 1925.

SIXTH QUARTERLY REPORT
ON THE SAN FRANCISCO CANCER SURVEY

The survey is making progress and a new publication containing a large amount of additional matter will shortly be available, containing the third and fourth quarterly reports with statistical appendices. The survey now represents about 20,000 cancer death certificates and about 1,000 returned questionnaires, outside of a number of additional questionnaires in prospect. It is, of course, self-evident that the data must first be available in permanent form before it will be advisable to advance whatever conclusions the facts may justify. The analysis of all certificates and questionnaires is in conformity to a standardized method of procedure which it is hoped in course of time may be adopted in similar investigations elsewhere. The questionnaires will probably be adopted by the Massachusetts Cancer Survey which has been recently authorized by the legislature, but unfortunately on a very limited scale of operations. My own method is also in conformity to a somewhat similar method which is being followed by the cancer committee of the League of Nations in connection with investigations of cancer of the breast and female generative organs in England, Italy and Holland.

The cities and areas that are now coöperating are the following: San Francisco, Oakland, Chicago, Rochester, Minn., Buffalo, Albany, Madison County, N. Y., Boston, East Orange, N. J., and New Orleans. As the result of recent addresses on cancer in Canada, read before Canadian public health and Ontario medical associations, there is a possibility that Canadian coöperation may be secured which would add a large amount of most useful data to the present investigation.*

While I originally intended to have limited the investigation to San Francisco, it was found necessary to secure data for other communities, since no comparable statistics would otherwise have been available. The universal use of the standard death certificate makes such a comparison possible, but only by the method that has been followed in the present investigation. Ordinarily, boards of health do not extend the analysis of death certificates beyond the age, the sex, the date and the cause of death, while my investigation includes every important item on the certificate directly or indirectly bearing upon the general aspect of the cancer problem.

A matter of special interest will be the detailed examination of cancer deaths by particular organs and parts. Ordinarily, both on the part of the census office and local board of health, cancer deaths are given only in

*Five years of cancer records have been received from British Columbia and the Province of Saskatchwan.

six groups of organs or parts, which precludes really useful observations. In my own classification I deal with about forty specified organs and parts according to sex, and for New Orleans also according to race. These death returns are now being worked out to clearly illustrate the particular frequency of special tumorous formations in different parts of the country. For illustration, for San Francisco it is shown that while the male mortality for cancer of the lip is 1.1 per 100,000 of population, it is only 0.2 for females. For Chicago, the corresponding figures are 0.4 per 100,000 for males and 0.2 for females. For cancer of tongue the San Francisco rate is 5.1 for males and 0.5 for females, but for Chicago the corresponding rates are 2.2 for males and 0.3 for females. An extraordinary difference is also disclosed in the relative frequency of cancer of stomach. For San Francisco the rate for males is 45.1 per 100,000 against only 21.8 for females, but for Chicago the corresponding rates are 33.9 for males and 23.4 for females. Cancer of the ovary appears to be equally frequent in both cities, or 3.6 for San Francisco and 3.5 for Chicago, but cancer of uterus occurs at the rate of 33.7 per 100,000 among the women of San Francisco, while the rate for the women of Chicago is only 26.0. Somewhat similar is the difference in the relative frequency of cancer of the female breast, which for San Francisco is 26.3 per 100,000 against only 19.9 for Chicago. For all forms of cancer combined the rate for the male population of San Francisco is 148.7 and for females 149.1, or practically the same, but for Chicago the corresponding figures are 110.1 for males and 125.9 for females.

Among other important facts disclosed by the investigation, mention may be made of some of the following: Treatment by operation previous to death occurred in 57.8 per 100,000 among the population of San Francisco and 44.8 for the population of Chicago. The rate of autopsy disposition was 19.8 for San Francisco and 10.2 for Chicago. Cancer deaths in hospitals occurred at the rate of 76.4 per 100,000 in San Francisco, but only at the rate of 47.5 in Chicago. The proportion of single persons for San Francisco was 18.6 per 100,000 against 12.0 for Chicago. The facts have not as yet been fully gone into, but they will probably be dealt with in detail later on.

Similar statistics will be available for other cities in course of time and may be included as an appendix to the printed report. Considerable progress has been made with localizing cancer deaths in San Francisco by particular blocks, streets and houses to ascertain the relative incidence by small civic divisions, or at least by assembly districts. The population data for this purpose have been furnished from unpublished sources of the census office, but unfortunately I have as yet been unable to obtain an absolutely accurate map for San Francisco for 1920, minor changes having been made in district boundaries during recent years. These and other matters will be taken up locally when I am in San Francisco during the present summer.

It is my intention to make myself thoroughly familiar with the topography of every section of the city which may reveal an excessive cancer incidence in proportion to population as far as this is possible to be determined. All the blocks of the city containing over five cancer deaths during the last five years have been marked on a map and these will be visited. This matter is one of considerable importance in view of some recent observations by Dr. Louis Sambon in the *Journal of Tropical Medicine and Hygiene*, in support of the parasitical theory of cancer origin. Thus far my conclusions on the basis of our San Francisco investigations do not lend support to this point of view, however well sustained for certain small localities in Europe. In course of time the control data for other cities will be dealt with in a like manner and the theory will be given the largest opportunity of proof or disproof as the case may be. The localizing of cancer deaths is extremely arduous, involving much supplementary correspondence to establish the facts of local residence with certainty regarding those who die in hospitals or institutions.

The residence question for San Francisco is also complicated by the proximity of Oakland. I am, therefore, pleased to say that the health officer of Oakland has seen his way clear to furnish me with cancer death certificates for 1924, which will be sufficient for the purpose of establishing how many San Francisco residents have died in Oakland or in Oakland institutions. To my regret it has not as yet been possible to extend the survey to other California cities, particularly Los Angeles and San Diego, which during recent years have shown extremely high cancer death rates. The San Diego rate now exceeds 200 per 100,000 of population! Granting that the rate is increased by non-residents or invalids from other localities, the matter is one demanding a searching inquiry into local facts which might add materially to our understanding of the cancer question on the Pacific Coast.

The questionnaire method of inquiry concerned with living cancer patients is producing excellent and instructive results. Aside from 575 cancer questionnaires for San Francisco, I have been furnished with quite a number of questionnaires for New Orleans through the kindness of Dr. Rudolph Matas; for Chicago through the kindness of Dr. Bundessen; for Buffalo through the kindness of Dr. Fronzac; for Newark, N. J., through the kindness of Dr. Edward J. Ill; and for Boston, Mass., through several physicians connected with local hospitals. Arrangements have also been made with several physicians in Washington, D. C., through the coöperation of Dr. Bovee and Dr. Kerr. For Buffalo an arrangement has been made with the State Institute of Malignant Diseases, under the direction of Dr. Simpson, to have questionnaires collected during the year. For this I have secured the assistance of a special investigator, whose expenses I have assumed. The questionnaire method provides the required amplification of data usually derived from death certificates alone. The preliminary results for San Francisco will be included in the forthcoming publication.

Others will probably be presented in the form of statistical appendices in due course of time. The outstanding facts revealed by this method of inquiry are the marked excess in meat and sugar consumption, the relatively large proportion of patients suffering from habitual intestinal stasis, the relatively high incidence of rheumatic affections, the relative rarity of gastric ulcers, gall stones and diabetes, and the negative results as regards an authentic family history of cancer.

In addition to the foregoing I have reëxamined a large number of reports on cancer cases made by life insurance companies about five or six years ago, but considered of doubtful value by a special committee of the American Society for the Control of Cancer. I felt that this material should not be entirely permitted to go to waste, and I have therefore tabulated all the reports furnished me, representing for cancer of breast 29 male cases and 1,726 female cases, and for cancer of buccal cavity 804 male cases and 158 female cases. The results will probably be dealt with in my next report.

As also bearing upon the cancer problem, I have made an examination of some fifteen years of mortality reports of the Massachusetts Soldiers' Home, which have been placed at my disposal. These have been dealt with in a preliminary way in a brief communication to the Boston Medical and Surgical Journal.

The investigation of San Francisco emphasizes a greater frequency of cancer among certain foreign-born elements. Unfortunately no census data are available that give the population by the birthplace of mothers, which, for medical purposes, is the most conclusive test of racial pathology. The difficulty has not yet been solved as to how the data can be dealt with. I had hoped to secure some information of real value regarding the Oriental population of San Francisco and possibly for the Mexican and Indian element of California and the southwest. The data for the Japanese population are especially interesting on account of the rarity of cancer of the breast in Japanese women. The general facts regarding the Japanese I have recently dealt with in a brief communication to the Journal of the American Medical Association.

More and more attention is now being given on the part of those concerned with cancer research to the rarity of cancer in native races, and I have therefore entered into extensive correspondence with authorities in remote parts of the world for the purpose of obtaining supplementary data in amplification of my own investigation among the native Indian population of this country and Central and South America. As far as possible these and many other matters will receive further consideration as opportunities permit.

The present investigation represents, in all probability, the largest amount of cancer material ever dealt with statistically in detail for any portion of this country. The census report for 1914 on the cancer mortality of the country entered largely into questions which would have been of

greater value if a comparative report for more recent years were available. No facts have come to my attention thus far which contradict the conclusions advanced by me during the last fifteen years, that cancer in this as well as other civilized countries is unquestionably and considerably on the increase. My cancer review for 1924 reëmphasizes this conclusion in a rather startling manner by visualizing the facts for a large number of cities, most of which now have recorded cancer death rates in excess of 100 per 100,000 of population. When the campaign against cancer was initiated by the American Society for the Control of Cancer about ten years ago, the actual mortality from cancer in this country was placed at 75,000. At the present time it is probably as high as 110,000, if not higher. Cancer control cannot be expected to prove effective until there is a much larger and more trustworthy body of facts available for particular localities. The underlying aim of the present investigation is, therefore, primarily to develop a method of inquiry useful for educational purposes, so as to bring the facts of a truly appalling situation clearly before the public.

F. L. H.

Newark, N. J.,
December 31, 1925.

APPENDICES

Appendix A—Cancer Mortality of Boston—1920-1924

Males and Females

Table

1. By months.
2. By birthplace of mothers.
3. By time of death.
4. By age at time of death.
5. By known duration of disease.
6. By treatment by operation.
7. By autopsy disposition.
9. By marital condition.

Table

10. By organs and parts.
11. By single years of life and average age, according to organs and parts.
12. By surgical operation, according to organs and parts.
13. By marital condition (females), according to organs and parts.
14. By duration of disease, according to organs and parts.

Appendix B—Cancer Mortality of Chicago—1924

Males and Females

Table

1. By organs and parts.
2. By months.
3. By birthplace of mother.
4. By method of diagnosis.
5. By length of residence at place of death.
6. By age at time of death.
7. By time of death.

Table

8. By duration of disease by months.
9. By treatment by operation, according to population—By autopsy disposition—By place of occurrence—By marital condition.
10. By age at time of death, by organs and parts.
11. By known duration of disease in months, according to organs and parts.

Appendix C—Cancer Mortality of Portsmouth, Eng.—1919-1924

Males and Females

Table

1. By age at time of death.

Table

2. By organs and parts.

Appendix D—Cancer Death Rates in Various Cities

Table

1. Albany, N. Y.—1919-1923.
2. Boston, Mass.—1920-1924.
3. Buffalo, N. Y.—1922.
4. Chicago, Ill.—1924.

Table

5. New Orleans, La. (White)—1919-1923.
6. New Orleans, La. (Colored)—1919-1923.
7. San Francisco, Calif.—1920-1924.
8. Portsmouth, Eng.—1919-1924.

Appendix E—Cancer Mortality of San Francisco—1920-1924

By Streets and Houses

Appendix F—Cancer Mortality of Boston, Mass.—1920-1924

By Streets and Houses

APPENDIX A

CANCER MORTALITY OF BOSTON—1920-1924

MALES AND FEMALES

Table 1

BY MONTHS

	Total	Males	Females
January	465	183	282
February	418	167	251
March	472	205	267
April	454	208	246
May	439	184	255
June	445	191	254
July	401	173	228
August	468	268	200
September	381	180	201
October	436	185	251
November	435	180	255
December	486	206	280
Totals	5300	2262	3038

Table 2

BY BIRTHPLACE OF MOTHERS

	Total	Males	Females		Total	Males	Females
U. S. A.	1344	505	839	Lithuania	6	2	4
Canada	123	50	73	Albania	2	1	1
Cape Breton	6	3	3	Austria	19	12	7
New Brunswick	104	28	76	Hungary	3	2	1
Nova Scotia	237	81	156	Turkey	1	–	1
Prince Edward Isles	52	15	37	Roumania	1	–	1
Newfoundland	68	30	38	Greece	4	3	1
Quebec	2	1	1	Bohemia	2	–	2
British West Indies	11	5	6	Servia	1	–	1
Honduras	1	1	–	Portugal	6	1	5
Brazil	1	1	–	Italy	165	92	73
Bermuda	1	–	1	France	12	8	4
England	233	103	130	Azores	3	2	1
Wales and North Wales	9	5	4	Switzerland	4	2	2
Scotland	129	47	82	Germany	178	83	95
Ireland	1680	722	958	Belgium	2	1	1
Sweden	84	39	45	Holland	10	4	6
Norway	20	9	11	Syria	7	4	3
Denmark	7	5	2	Hawaii	2	2	–
Finland	10	5	5	China	8	8	–
Latvia	1	1	–	Unknown	400	188	112
Poland	24	16	8				
Russia	310	168	142	Totals	5300	2262	3038
Armenia	7	7	–				

Males and Females

Table 3

BY TIME OF DEATH

Hour, A. M.	Total	Per cent.	Males	Per cent.	Females	Per cent.
1	93		32		61	
2	117		51		66	
3	97		40		57	
Total	307	11.8	123	11.2	184	12.3
4	90		28		62	
5	107		40		67	
6	120		49		71	
Total	317	12.2	117	10.6	200	13.3
7	100		34		66	
8	96		43		53	
9	107		58		49	
Total	303	11.7	135	12.3	168	11.2
10	110		54		56	
11	114		51		63	
12	100		36		64	
Total	324	12.5	141	12.8	183	12.2
Total A. M.	1,251		516		735	
Hour, P. M.						
1	92		31		61	
2	116		47		69	
3	145		64		81	
Total	353	13.6	142	12.9	211	14.1
4	120		52		68	
5	137		67		70	
6	111		43		68	
Total	368	14.2	162	14.7	206	13.7
7	104		40		64	
8	101		44		57	
9	112		49		63	
Total	317	12.2	133	12.1	184	12.3
10	109		46		63	
11	107		57		50	
12	94		43		51	
Total	310	11.9	146	13.3	164	10.9
Total P. M.	1,348		583		765	
Known total	2,599	100.1	1,099	99.9	1,500	100.0
Unknown	2,701		1,163		1,538	
Grand total	5,300		2,262		3,038	

Males and Females

Table 4

BY AGE AT TIME OF DEATH

Age	Total	Years of Life	Males	Years of Life	Females	Years of Life
1	9	9	7	7	2	2
2	6	12	4	8	2	4
3	6	18	3	9	3	9
4	5	20	3	12	2	8
5	4	20	–	–	4	20
6	1	6	–	–	1	6
7	3	21	1	7	2	14
8	2	16	2	16	–	–
9	–	–	–	–	–	–
10	2	20	–	–	2	20
11	1	11	1	11	–	–
12	3	36	1	12	2	24
13	3	39	2	26	1	13
14	2	28	2	28	–	–
15	4	60	2	30	2	30
16	1	16	–	–	1	16
17	1	17	1	17	–	–
18	3	54	3	54	–	–
19	2	38	1	19	1	19
20	3	60	1	20	2	40
21	4	84	3	63	1	21
22	5	110	4	88	1	22
23	3	69	1	23	2	46
24	1	24	–	–	1	24
25	5	125	2	50	3	75
26	12	312	5	130	7	182
27	11	297	5	135	6	162
28	10	280	5	140	5	140
29	9	261	3	87	6	174
30	19	570	10	300	9	270
31	15	465	8	248	7	217
32	17	544	6	192	11	352
33	24	792	10	330	14	462
34	25	850	10	340	15	510
35	21	735	5	175	16	560
36	26	936	9	324	17	612
37	28	1036	11	407	17	629
38	38	1444	14	532	24	912
39	47	1833	19	741	28	1092
40	50	2000	18	720	32	1280
41	39	1599	9	369	30	1230
42	73	3066	20	840	53	2226
43	76	3268	17	731	59	2537
44	68	2992	21	924	47	2068
45	87	3915	30	1350	57	2565
46	88	4048	34	1564	54	2484
47	108	5076	39	1833	69	3243
48	112	5376	53	2544	59	2832
49	91	4459	41	2009	50	2450
50	133	6650	52	2600	81	4050
51	116	5916	45	2295	71	3621
52	131	6812	59	3068	72	3744

Males and Females

Table 4 (By Age at Time of Death) Continued

Age	Total	Years of Life	Males	Years of Life	Females	Years of Life
53	146	7738	67	3551	79	4187
54	145	7830	55	2970	90	4860
55	186	10230	82	4510	104	5720
56	158	8848	87	4872	71	3976
57	125	7125	57	3249	68	3876
58	165	9570	68	3944	97	5626
59	158	9322	70	4130	88	5192
60	211	12660	87	5220	124	7440
61	126	7685	46	2806	80	4880
62	147	9114	75	4650	72	4464
63	169	10647	77	4851	92	5796
64	145	9280	77	4928	68	4352
65	144	9360	80	5200	64	4160
66	121	7986	54	3564	67	4422
67	120	8040	52	3484	68	4556
68	126	8568	59	4012	67	4556
69	115	7935	47	3243	68	4692
70	164	11480	74	5180	90	6300
71	111	7881	55	3905	56	3976
72	112	8064	43	3096	69	4968
73	100	7300	48	3504	52	3796
74	99	7326	43	3182	56	4144
75	99	7425	49	3675	50	3750
76	68	5168	35	2660	33	2508
77	56	4312	29	2233	27	2079
78	46	3588	15	1170	31	2418
79	55	4345	15	1185	40	3160
80	67	5360	23	1840	44	3520
81	35	2835	10	810	25	2025
82	32	2624	13	1066	19	1558
83	33	2739	11	913	22	1826
84	28	2352	10	840	18	1512
85	37	3145	13	1105	24	2040
86	25	2150	7	602	18	1548
87	19	1653	6	522	13	1131
88	11	968	3	264	8	704
89	7	623	2	178	5	445
90	10	900	5	450	5	450
91	4	364	–	–	4	364
92	3	276	1	92	2	184
93	3	279	1	93	2	186
94	2	188	1	94	1	94
95	2	190	1	95	1	95
96	1	96	–	–	1	96
98	1	98	1	98	–	–
99	2	198	–	–	2	198
Known total	5,292	312,310	2,256	133,463	3,036	178,847
Average age		59.0		59.2		58.9
Unknown total	8		6		2	
Total total	5,300		2,262		3,038	

Males and Females

SUMMARY—Table 4

Years	Total	Per cent.	Males	Per cent.	Females	Per cent.
1– 9	36	0.7	20	0.9	16	0.5
10–19	22	0.4	13	0.6	9	0.3
20–29	63	1.2	29	1.3	34	1.1
30–39	260	4.9	102	4.5	158	5.2
40–49	792	15.0	282	12.5	510	16.8
50–59	1463	27.6	642	28.5	821	27.0
60–69	1424	26.9	654	29.0	770	25.4
70–79	910	17.2	406	18.0	504	16.6
80–89	294	5.6	98	4.3	196	6.5
90 & over	28	0.5	10	0.4	18	0.6
Known total	5292	100.0	2256	100.0	3036	100.0
Unknown	8		6		2	
Total total	5,300		2.262		3,038	

Table 5

BY KNOWN DURATION OF DISEASE

Months	Total	Aggregate Months	Males	Aggregate Months	Females	Aggregate Months
1	60	60	25	25	35	35
2	92	184	55	110	37	74
3	145	435	77	231	68	204
4	128	512	67	268	61	244
5	85	425	44	220	41	205
6	420	2520	196	1176	224	1344
7	75	525	38	266	37	259
8	115	920	65	520	50	400
9	82	738	38	342	44	396
10	59	590	27	270	32	320
11	24	264	8	88	16	176
12	665	7980	302	3624	363	4356
13	20	260	4	52	16	208
14	36	504	18	252	18	252
15	33	495	11	165	22	330
16	22	352	10	160	12	192
17	11	187	4	68	7	119
18	158	2844	66	1188	92	1656
19	6	114	1	19	5	95
20	17	340	3	60	14	280
21	10	210	6	126	4	84
22	8	176	3	66	5	110
23	3	69	1	23	2	46
24	443	10,632	142	3408	301	7224
25	5	125	–	–	5	125
26	5	130	3	78	2	52
27	10	270	1	27	9	243
28	2	56	–	–	2	56
29	1	29	–	–	1	29
30	41	1230	13	390	28	840
31	2	62	2	62	–	–
32	8	256	1	32	7	224
33	3	99	–	–	3	99
34	1	34	–	–	1	34

Males and Females

Table 5 (By Known Duration of Disease) Continued

Months	Total	Aggregate Months	Males	Aggregate Months	Females	Aggregate Months
36	155	5580	47	1692	108	3888
37	2	74	–	–	2	74
38	1	38	–	–	1	38
39	2	78	–	–	2	78
41	4	164	–	–	4	164
42	13	546	4	168	9	378
45	1	45	–	–	1	45
46	1	46	1	46	–	–
48	62	2976	17	816	45	2160
51	1	51	1	51	–	–
54	3	162	–	–	3	162
59	1	59	–	–	1	59
60	39	2340	14	840	25	1500
66	1	66	–	–	1	66
72	20	1440	7	504	13	936
84	10	840	1	84	9	756
96	12	1152	4	384	8	768
98	1	98	1	98	–	–
120	8	960	4	480	4	480
132	3	396	–	–	3	396
144	5	720	1	144	4	576
156	2	312	–	–	2	312
180	1	180	–	–	1	180
200	1	200	–	–	1	200
204	1	204	1	204	–	–
216	3	648	1	216	2	432
240	4	960	1	240	3	720
408	1	408	–	–	1	408
Known total	3,153	54,370	1,336	19,283	1,817	35,087
Average (months)		17.2		14.4		19.3
Unknown total	2,147		926		1,221	
Total total	5,300		2,262		3,038	
Average years		1.4		1.2		1.6

Table 6

BY TREATMENT BY OPERATION

	Total	Per cent.	Males	Per cent.	Females	Per cent.
Yes	1,912	61.8	825	62.5	1,088	61.3
No	1,181	38.2	494	37.5	687	38.7
Known method	3,093	100.0	1,319	100.0	1,775	100.0
Unknown	2,207		943		1,263	
Total	5,300		2,262		3,038	

Table 7

BY AUTOPSY DISPOSITION

	Total	Per cent.	Males	Per cent.	Females	Per cent.
Yes	294	13.8	157	17.9	137	10.9
No	1,837	86.2	721	82.1	1,116	89.1
Known method	2,131	100.0	878	100.0	1,253	100.0
Unknown	3,169		1,384		1,785	
Total	5,300		2,262		3,038	

Males and Females

(Table 8 omitted)

Table 9

BY MARITAL CONDITION

	Females	Per cent.
Married	1,285	42.4
Single	622	20.5
Widowed	1,088	35.9
Divorced	37	1.2
Known total	3,032	100.0
Unknown	6	
Total total	3,038	

Table 10

BY ORGANS AND PARTS

Parts	Totals	Males	Females	Parts	Totals	Males	Females
Lips	22	21	1	Rectum	287	141	146
Tongue	80	74	6	Ovary	96	–	96
Mouth	7	6	1	Uterus	572	–	572
Throat	48	41	7	Vulva and vagina	27	–	27
Jaw	61	48	13	Others of this class	11	–	11
Neck	101	64	37	Breast	492	–	492
Face	38	20	18	Skin	25	7	18
Eye	10	4	6	Larynx	63	54	9
Nose	7	4	3	Lungs and pleura	143	70	73
Ear	12	3	9	Pancreas	133	70	63
Head	1	–	1	Kidney	76	42	34
Tonsil	10	7	3	Prostate	141	141	–
Cheek	6	5	1	Bladder	191	129	62
Hard palate	7	7	–	Brain	24	8	16
Chin	–	–	–	Bones	126	61	65
Pharynx	8	6	2	Testes	15	15	–
Oesophagus	184	147	37	Penis	9	9	–
Stomach	1033	571	462	Heart	4	1	3
Liver and gall bladder	454	191	263	Appendix	2	–	2
Mesentery and peritoneum	49	20	29	General	84	36	48
Intestines	641	239	402	Totals	5,300	2,262	3,038

Males and Females

SUMMARY—Table 10

	Total	Per cent.	Males	Per cent.	Females	Per cent.
Cancer of buccal cavity	602	11.4	457	20.2	145	4.8
Cancer of stomach and liver	1,487	28.0	762	33.7	725	23.9
Cancer of mesentery, intestines and rectum	977	18.4	400	17.7	577	19.0
Cancer of female genital organs	706	13.3			706	23.2
Cancer of breast	492	9.3			492	16.2
Cancer of the skin	25	.5	7	.3	18	.6
Cancer of other organs or of organs not specified	1.011	19.1	636	28.1	375	12.3
Totals	5,300	100.0	2,262	100.0	3,038	100.0

Table 11

BY SINGLE YEARS OF LIFE AND AVERAGE AGE ACCORDING TO ORGANS AND PARTS

LIPS

Males

Age	Number	Total Years of Life
50	1	50
51	2	102
54	1	54
56	2	112
60	1	60
61	1	61
62	2	124
63	3	189
70	1	70
73	1	73
74	1	74
75	1	75
78	1	78
80	1	80
88	1	88
Totals	21	1,290
Average age (years)		61.4

Females

67	1	67
Totals	1	67
Average age (years)		67.0

TONGUE

Males

39	1	39
40	1	40
42	3	126
45	1	45
47	2	94
48	1	48
49	2	98
50	4	200
52	4	208
53	2	106
54	2	108
55	3	165
56	6	336
57	1	57
58	2	116
59	3	177
60	3	180
61	1	61
62	2	124
63	1	63
64	2	128
65	9	585
66	1	66
67	1	67
68	1	68
69	1	69
70	2	140
71	2	142
72	1	72
73	4	292
74	1	74
77	1	77
80	1	80
82	1	82
83	1	83
89	1	89
Totals	75	4,505
Average age (years)		60.1

Females

46	1	46
47	1	47
60	1	60

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

TONGUE—Females (Continued)

Age	Number	Total Years of Life
62	1	62
63	1	63
80	1	80
Totals	6	358
Average age (years)		59.7

MOUTH

	Males	
40	1	40
41	1	41
48	1	48
51	1	51
67	1	67
73	1	73
Totals	6	320
Average age (years)		53.3
	Females	
85	1	85
Totals	1	85
Average age (years)		85.0

JAW

	Males	
12	1	12
13	1	13
35	1	35
36	1	36
39	1	39
48	1	48
49	2	98
50	1	50
51	2	102
52	2	104
53	1	53
55	5	275
56	1	56
57	2	114
58	1	58
59	1	59
60	3	180
61	3	183
62	1	62
63	2	126
64	3	192
65	2	130
68	1	68
69	1	69
70	2	140
72	1	72
75	1	75
76	1	76
77	1	77
78	1	78
81	1	81
Totals	48	2,761
Average age (years)		57.5
	Females	
15	1	15
31	1	31
44	1	44
48	1	48
49	1	49
53	1	53
64	1	64
66	1	66
71	1	71
75	1	75
80	1	80
83	1	83
84	1	84
Total	13	763
Average age (years)		58.7

THROAT

	Males	
34	1	34
46	2	92
47	1	47
48	1	48
49	2	98
50	1	50
51	2	102
52	1	52
53	1	53
54	1	54
55	1	55
57	2	114
58	4	232
60	3	180
62	1	62
63	3	189
64	1	64
65	4	260
66	1	66
70	3	210
72	1	72
74	1	74
81	1	81
84	1	84
85	1	85
Totals	41	2,458
Average age (years)		60.0

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

THROAT (Continued)

Age	Females Number	Total Years of Life
43	1	43
54	1	54
55	1	55
57	1	57
65	1	65
77	1	77
96	1	96
Totals	7	447
Average age (years)		63.9

NECK

Age	Males Number	Total Years of Life
1	1	1
21	1	21
26	1	26
27	1	27
30	1	30
33	1	33
38	1	33
40	1	40
42	1	42
44	1	44
45	4	180
47	1	47
48	2	96
50	4	200
51	1	51
52	3	156
53	2	106
54	1	54
55	4	220
56	2	112
59	2	118
60	6	360
61	1	61
62	3	186
63	1	63
64	1	64
65	1	65
66	2	132
67	2	134
68	1	68
70	2	140
71	1	71
74	2	148
75	3	225
77	1	77
82	1	82
Totals	64	3,518
Average age (years)		55.0

Age	Females Number	Total Years of Life
30	1	30
32	1	32
33	1	33
40	1	40
41	1	41
42	1	42
44	1	44
49	1	49
52	2	104
54	1	54
55	1	55
56	1	56
58	2	116
60	3	180
61	1	61
63	1	63
66	2	132
67	1	67
68	1	68
70	2	140
72	1	72
73	1	73
75	1	75
76	1	76
79	1	79
80	3	240
89	1	89
91	1	91
99	1	99
Totals	37	2,301
Average age (years)		62.2

FACE

Age	Males Number	Total Years of Life
47	1	47
49	1	49
54	1	54
58	3	174
59	1	59
61	1	61
64	1	64
65	4	260
66	1	66
70	1	70
71	1	71
75	1	75
79	1	79
94	1	94
98	1	98
Totals	20	1,321
Average age (years)		66.1

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

FACE (Continued)

Age	Number	Total Years of Life
	Females	
46	1	46
48	1	48
51	1	51
68	2	136
72	1	72
73	2	146
75	2	150
79	2	158
85	2	170
86	1	86
91	2	182
93	1	93
Totals	18	1,338
Average age (years)		74.3

EYES

	Males	
4	1	4
56	1	56
67	1	67
68	1	68
Totals	4	195
Average age (years)		48.8
	Females	
3	1	3
6	1	6
50	1	50
57	1	57
59	1	59
77	1	77
Totals	6	252
Average age (years)		42.0

NOSE

	Males	
27	1	27
33	1	33
60	1	60
81	1	81
Totals	4	201
Average age (years)		50.3
	Females	
80	1	80
83	1	83
92	1	92
Totals	3	255
Average age (years)		85.0

EAR

	Males	
62	1	62
68	1	68
88	1	88
Totals	3	218
Average age (years)		72.7
	Females	
50	1	50
62	1	62
64	1	64
71	1	71
73	1	73
77	1	77
80	2	160
86	1	86
Totals	9	643
Average age (years)		71.4

HEAD

	Females	
80	1	80
Totals	1	80
Average age (years)		80.0

TONSILS

	Males	
39	1	39
53	1	53
56	2	112
58	1	58
65	1	65
68	1	68
Totals	7	395
Average age (years)		56.4
	Females	
59	1	59
60	1	60
84	1	84
Totals	3	203
Average age (years)		67.7

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

CHEEK

Males

Age	Number	Total Years of Life
44	1	44
60	1	60
66	1	66
73	1	73
75	1	75
Totals	5	318
Average age (years)		63.6

Females

87	1	87
Totals	1	87
Average age (years)		87.0

HARD PALATE

Males

47	1	47
50	1	50
57	1	57
62	1	62
68	1	68
70	1	70
Totals	6	354
Average age (years)		59.0

PHARYNX

Males

43	1	43
53	1	53
56	1	56
64	1	64
73	1	73
77	1	77
Totals	6	366
Average age (years)		61.0

Females

27	1	27
54	1	54
Totals	2	81
Average age (years)		40.5

OESOPHAGUS

Males

32	1	32
33	1	33
38	1	38
42	2	84
43	2	86
44	1	44
45	2	90
46	2	92
47	2	94
48	5	240
49	1	49
50	6	300
51	4	204
52	6	312
53	1	53
54	2	108
55	10	550
56	4	224
57	2	114
58	9	522
59	5	295
60	12	720
61	5	305
62	8	496
63	6	378
64	3	192
65	5	325
66	5	330
67	2	134
68	2	136
69	1	69
70	2	140
71	5	355
72	2	144
73	6	438
74	2	148
75	1	75
76	3	228
77	1	77
80	1	80
81	2	162
82	1	82
84	1	84
85	1	85
86	1	86
Totals	147	8,833
Average age (years)		60.1

Females

37	1	37
39	1	39
41	1	41
43	2	86
45	3	135
47	2	94
48	1	48
52	2	104
53	2	106

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

OESOPHAGUS—Females (Continued)

Age	Number	Total Years of Life
54	2	108
58	1	58
59	2	118
61	1	61
62	1	62
63	2	126
64	1	64
66	2	132
68	2	136
69	3	207
71	2	142
73	1	73
76	1	76
88	1	88
Totals	37	2,141
Average age (years)		57.9

STOMACH

Males

25	1	25
28	2	56
31	2	62
32	1	32
33	3	99
34	4	136
35	3	105
36	1	36
37	4	148
38	8	304
39	4	156
40	4	160
41	5	205
42	3	126
43	5	215
44	6	264
45	7	315
46	6	276
47	14	658
48	16	768
49	13	637
50	12	600
51	10	510
52	18	936
53	26	1,378
54	18	972
55	17	935
56	19	1,064
57	16	912
58	18	1,044
59	19	1,121
60	25	1,500
61	7	427
62	21	1,302
63	22	1,386
64	26	1,664
65	20	1,300
66	7	462
67	17	1,139
68	16	1,088
69	14	966
70	16	1,120
71	10	710
72	15	1,080
73	8	584
74	10	740
75	5	375
76	10	760
77	6	462
78	2	156
79	1	79
80	9	720
81	1	81
82	4	328
83	4	332
85	3	255
86	2	172
87	1	87
90	2	180
92	1	92
93	1	93
Total	571	33,895
Average age (years)		59.4

Females

20	1	20
26	1	26
28	1	28
29	2	58
30	2	60
32	2	64
33	3	99
34	2	68
35	3	105
36	3	108
37	2	74
38	4	152
39	4	156
40	3	120
41	3	123
42	6	252
43	3	129
44	1	44
45	7	315
46	6	276
47	13	611

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

STOMACH—Females (Continued)

Age	Number	Total Years of Life
48	8	384
49	1	49
50	11	550
51	10	510
52	10	520
53	10	530
54	9	486
55	13	715
56	6	336
57	12	684
58	19	1,102
59	11	649
60	22	1,320
61	13	793
62	13	806
63	14	882
64	14	896
65	9	585
66	11	726
67	10	670
68	11	748
69	16	1,104
70	19	1,330
71	10	710
72	13	936
73	14	1,022
74	13	962
75	9	675
76	9	684
77	3	231
78	5	390
79	6	474
80	10	800
81	7	567
82	4	328
83	2	166
84	1	84
85	4	340
86	3	258
87	2	174
90	2	180
92	1	92
95	1	95
Totals	463	28,431
Average age (years)		61.4

LIVER

	Males	
1	2	2
29	1	29
30	2	60
33	1	33
37	2	74
41	1	41
42	5	210
43	1	43
44	1	44
45	3	135
46	4	184
47	2	94
48	3	144
49	6	294
50	5	250
51	2	102
52	4	208
53	4	212
55	4	220
56	7	392
57	8	456
58	7	406
59	4	236
60	13	780
61	5	305
62	7	434
63	6	378
64	7	448
65	6	390
66	3	198
67	4	268
68	6	408
69	2	138
70	9	630
71	3	213
72	6	432
73	1	73
74	5	370
75	6	450
76	4	304
77	2	154
78	1	78
80	3	240
81	2	162
83	2	165
84	3	252
85	1	85
86	1	86
87	1	87
89	1	89
95	1	95
Totals	190	11,582
Average age (years)		61.0
Unknown	1	
Total total	191	

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

LIVER (Continued)

Females

Age	Number	Total Years of Life
5	1	5
7	1	7
26	1	26
27	2	54
32	1	32
34	1	34
35	1	35
36	1	36
37	1	37
38	2	76
39	1	39
40	2	80
42	3	126
43	4	172
44	3	132
45	2	90
46	3	138
47	2	94
48	6	288
49	5	245
50	7	350
51	5	255
52	7	364
53	6	318
54	8	432
55	6	330
56	9	504
57	5	285
58	10	580
59	6	354
60	11	660
61	11	671
62	8	496
63	10	630
64	7	448
65	9	585
66	9	594
67	6	402
68	6	408
69	8	552
70	8	560
71	4	284
72	8	576
73	6	438
74	4	296
75	4	300
77	4	308
78	6	468
79	6	474
80	6	480
81	2	162
83	2	166
85	1	85
86	1	86
88	1	88
89	1	89
Totals	261	15,824
Average age (years)		60.6
Unknown	2	
Total total	263	

PERITONEUM

Males

22	1	22
26	1	26
28	1	28
30	3	90
36	1	36
40	1	40
46	1	46
48	1	48
49	1	49
51	2	102
53	1	53
63	1	63
67	2	134
68	1	68
69	1	69
73	1	73
Totals	20	947
Average age (years)		47.4

Females

4	1	4
5	1	5
24	1	24
26	1	26
42	1	42
44	1	44
48	2	96
50	1	50
52	1	52
53	1	53
54	2	108
55	1	55
56	1	56
58	1	58
59	2	118
60	2	120
62	1	62
65	1	65
66	2	132
69	1	69

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

PERITONEUM—Females (Continued)

Age	Number	Total Years of Life
75	1	75
80	2	160
82	1	82
Totals	29	1,556
Average age (years)		53.7

INTESTINES

	Number	Total Years of Life
	Males	
17	1	17
18	1	18
22	1	22
25	1	25
26	1	26
28	1	28
29	1	29
31	2	62
33	1	33
36	1	36
37	3	111
38	3	114
40	3	120
41	4	164
42	2	84
43	2	86
44	2	88
45	2	90
47	4	188
48	7	336
49	3	147
50	6	300
51	3	153
52	7	364
53	3	159
54	3	162
55	10	550
56	9	504
57	8	456
58	7	406
59	7	413
60	8	480
61	6	366
62	4	248
63	11	693
64	8	512
65	9	585
66	4	264
67	4	268
68	3	204
69	7	483
70	9	630
71	7	497
72	5	360
73	6	438
74	6	444
75	7	525
76	4	304
77	4	308
78	4	312
79	6	474
80	2	160
83	1	83
84	1	84
85	2	170
87	1	87
Totals	238	14,270
Average age (years)		60.0
Unknown	1	
Total total	239	
	Females	
4	1	4
5	1	5
12	2	24
15	1	15
28	1	28
29	1	29
30	1	30
31	1	31
33	1	33
34	1	34
35	1	35
36	1	36
37	1	37
38	1	38
39	3	117
40	4	160
41	4	164
42	4	168
43	10	430
44	4	176
45	8	360
46	4	184
47	12	564
48	5	240
49	6	294
50	10	500
51	7	357
52	8	416
53	5	265
54	7	378
55	19	1,045
56	11	616
57	9	513
58	11	638

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

INTESTINES—Females (Continued)

Age	Number	Total Years of Life
59	6	354
60	18	1,080
61	7	427
62	6	372
63	13	819
64	6	384
65	11	715
66	14	924
67	11	737
68	12	816
69	7	483
70	17	1,190
71	10	710
72	14	1,008
73	4	292
74	12	888
75	12	900
76	4	304
77	6	462
78	7	546
79	4	316
80	6	480
81	6	486
82	4	328
83	3	249
84	5	420
85	7	595
88	2	176
90	1	90
Totals	401	24,515
Average age (years)		61.1
Unknown	1	
Total total	402	

RECTUM

Males

Age	Number	Total Years of Life
27	1	27
31	1	31
33	1	33
34	1	34
37	1	37
38	1	38
39	3	117
40	1	40
44	4	176
46	1	46
47	1	47
49	5	245
50	2	100
51	5	255
52	5	260
53	4	212
54	3	162
55	6	330
56	7	392
57	8	456
58	2	116
59	3	177
60	4	240
61	5	305
62	3	186
63	5	315
64	5	320
65	6	390
66	5	330
67	3	201
68	5	340
69	5	345
70	8	560
71	3	213
72	3	216
73	2	146
74	4	296
75	2	150
76	3	228
79	1	79
80	2	160
84	1	84
Totals	141	8,435
Average age (years)		59.8

Females

32	1	32
34	1	34
35	2	70
36	3	108
39	2	78
40	2	80
41	2	82
42	2	84
43	1	43
44	2	88
45	4	180
47	1	47
48	3	144
49	3	147
51	6	306
52	3	156
53	6	318
54	4	216
55	5	275
56	5	280
57	4	228
58	3	174

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

RECTUM—Females (Continued)

Age	Number	Total Years of Life
59	3	177
60	4	240
61	4	244
62	4	248
63	7	441
64	4	256
65	3	195
66	1	66
67	4	268
68	4	272
69	6	414
70	7	490
71	1	71
72	2	144
73	3	219
74	3	222
75	2	150
76	2	152
78	5	390
79	1	79
81	3	243
83	2	166
86	3	258
87	2	174
93	1	93
Totals	146	8,842
Average age (years)		60.6

OVARY

	Females	
25	1	25
26	1	26
30	1	30
32	1	32
33	1	33
34	1	34
35	1	35
38	1	38
39	2	78
40	1	40
41	1	41
42	1	42
44	1	44
45	1	45
46	2	92
47	2	94
48	2	96
49	4	196
50	3	150
51	2	102
52	4	208
53	4	212
54	4	216
55	6	330
56	1	56
57	2	114
58	3	174
59	5	295
60	2	120
61	4	244
62	2	124
63	3	189
64	2	128
65	1	65
67	5	335
68	2	136
70	1	70
72	2	144
74	2	148
75	2	150
76	1	76
78	1	78
80	1	80
81	1	81
82	1	82
84	2	168
86	1	86
87	1	87
Totals	96	5,469
Average age (years)		57.0

UTERUS

	Females	
21	1	21
25	1	25
26	1	26
27	2	54
29	3	87
30	3	90
31	2	62
32	2	64
33	4	132
34	6	204
35	1	35
36	5	180
37	7	259
38	9	342
39	7	273
40	10	400
41	10	410
42	14	588
43	21	903
44	16	704
45	14	630
46	22	1,012

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

UTERUS (Continued)

Age	Number	Total Years of Life
47	10	470
48	15	720
49	13	637
50	19	950
51	22	1,122
52	13	676
53	18	954
54	14	756
55	23	1,265
56	8	448
57	14	798
58	18	1,044
59	15	885
60	19	1,140
61	19	1,159
62	15	930
63	17	1,071
64	14	896
65	10	650
66	11	726
67	13	871
68	13	884
69	6	414
70	10	700
71	4	284
72	6	432
73	6	438
74	8	592
75	5	375
76	6	456
77	3	231
78	2	156
79	6	474
80	3	240
81	2	162
82	1	82
83	2	166
84	1	84
85	2	170
86	2	172
87	1	87
89	1	89
99	1	99
Totals	572	31,456
Average age (years)		55.0

VULVA AND VAGINA

	Females	
35	1	35
39	1	39
42	2	84
46	1	46
51	2	102
57	1	57
58	1	58
59	1	59
61	1	61
62	2	124
63	1	63
64	1	64
67	1	67
68	1	68
70	1	70
71	1	71
72	2	144
73	1	73
77	1	77
79	1	79
81	1	81
84	1	84
89	1	89
Totals	27	1,695
Average age (years)		62.8

OTHERS OF THIS CLASS

	Females	
3	1	3
31	1	31
35	1	35
48	2	96
50	1	50
57	1	57
58	1	58
62	1	62
64	1	64
70	1	70
Totals	11	525
Average age (years)		47.8

BREAST

	Females	
22	1	22
26	1	26
28	2	56
31	2	62
32	2	64
33	3	99
34	2	68
35	3	105
36	2	72
37	1	37
38	3	114
39	7	273
40	3	120
41	4	164
42	14	588

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

BREAST—Females (Continued)

Age	Number	Total Years of Life
43	10	430
44	10	440
45	15	675
46	6	276
47	12	564
48	8	384
49	13	637
50	14	700
51	10	510
52	11	572
53	11	583
54	19	1,026
55	16	880
56	18	1,008
57	11	627
58	19	1,102
59	18	1,062
60	21	1,260
61	11	671
62	12	744
63	14	882
64	8	512
65	10	650
66	7	462
67	10	670
68	5	340
69	9	621
70	14	980
71	15	1,065
72	10	720
73	5	365
74	7	518
75	9	675
76	1	76
77	6	462
78	4	312
79	7	553
80	3	240
82	6	492
83	6	498
84	2	168
85	5	425
86	4	344
87	3	261
88	3	264
89	1	89
91	1	91
94	1	94
Totals	491	28,850
Average age (years)		58.8
Unknown	1	
Total total	492	

SKIN

Males

Age	Number	Total Years of Life
14	1	14
51	1	51
53	1	53
59	1	59
74	1	74
75	1	75
85	1	85
Totals	7	411
Average age (years)		58.7

Females

2	1	2
23	1	23
33	1	33
38	1	38
55	1	55
60	2	120
61	1	61
65	1	65
69	1	69
71	2	142
74	1	74
80	1	80
83	1	83
87	1	87
88	1	88
90	1	90
Totals	18	1,110
Average age (years)		61.7

LARYNX

Males

33	1	33
44	1	44
47	1	47
48	2	96
49	2	98
50	1	50
51	1	51
52	3	156
53	1	53
54	2	108
55	3	165
56	4	224
57	1	57
58	4	232
59	2	118
60	3	180
61	4	244
62	1	62
63	1	63

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

LARYNX—Males (Continued)

Age	Number	Total Years of Life
64	3	192
66	3	198
67	1	67
68	2	136
71	1	71
73	2	146
77	1	77
78	1	78
86	1	86
87	1	87
Totals	54	3,219
Average age (years)		59.6

Females

32	1	32
54	1	54
56	1	56
57	1	57
58	1	58
59	1	59
60	1	60
73	1	73
75	1	75
Totals	9	524
Average age (years)		58.2

LUNGS

Males

2	1	2
7	1	7
8	1	8
15	1	15
18	1	18
20	1	20
22	1	22
23	1	23
27	1	27
30	1	30
32	2	64
34	2	68
36	1	36
38	1	38
39	1	39
40	1	40
42	2	84
43	1	43
45	2	90
46	5	230
47	1	47
48	4	192
50	1	50
51	2	102
52	2	104
53	4	212
54	1	54
55	3	165
56	3	168
57	1	57
58	1	58
59	2	118
60	2	120
62	1	62
64	1	64
65	1	65
66	1	66
68	3	204
69	1	69
70	2	140
71	1	71
72	1	72
74	1	74
76	1	76
79	1	79
Totals	70	3,393
Average age (years)		48.5

Females

2	1	2
10	1	10
13	1	13
16	1	16
20	1	20
25	1	25
26	1	26
27	1	27
28	1	28
34	1	34
35	1	35
36	1	36
37	1	37
40	4	160
41	1	41
43	3	129
44	2	88
45	1	45
46	3	138
47	3	141
49	1	49
50	1	50
52	3	156
53	4	212
54	2	108
55	4	220
56	1	56

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

LUNGS—Females (Continued)

Age	Number	Total Years of Life
57	1	57
58	1	58
59	2	118
60	2	120
61	2	122
62	1	62
63	1	63
64	2	128
65	2	130
66	1	66
68	1	68
69	1	69
71	2	142
74	1	74
76	2	152
78	1	78
79	1	79
82	1	82
83	1	83
90	1	90
Totals	73	3,743
Average age (years)		51.3

PANCREAS

Males

1	1	1
32	1	32
34	1	34
36	1	36
37	1	37
38	1	38
42	1	42
43	1	43
45	1	45
47	1	47
48	2	96
50	2	100
52	2	104
53	1	53
54	3	162
55	5	275
56	5	280
57	1	57
58	4	232
60	3	180
61	1	61
62	4	248
63	2	126
64	4	256
65	3	195
66	5	330
67	1	67
68	1	68
69	2	138
71	3	213
73	1	73
75	1	75
78	1	78
82	1	82
84	1	84
Totals	69	3 988
Average age (years)		57.8
Unknown	1	
Total total	70	

Females

1	1	1
35	1	35
37	2	74
38	1	38
41	1	41
42	3	126
47	2	94
48	2	96
50	4	200
51	1	51
52	2	104
54	4	216
55	2	110
56	2	112
57	1	57
59	4	236
60	4	240
61	2	122
62	1	62
63	1	63
64	3	192
65	1	65
67	1	67
68	1	68
69	3	207
70	4	280
72	2	144
73	2	146
74	2	148
76	1	76
80	1	80
87	1	87
Totals	63	3,638
Average age (years)		57.7

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

KIDNEYS

Males

Age	Number	Total Years of Life
1	2	2
2	2	4
3	3	9
5	1	5
39	1	39
45	4	180
46	1	46
48	2	96
51	1	51
53	2	106
54	1	54
55	1	55
58	1	58
59	2	118
60	4	240
61	3	183
62	2	124
64	1	64
65	1	65
68	1	68
69	1	69
70	1	70
71	1	71
76	2	152
Totals	41	1,929
Average age (years)		47.0
Unknown	1	
Total total	42	

Females

1	1	1
42	2	84
43	2	86
46	1	46
47	1	47
49	2	98
50	1	50
51	1	51
53	1	53
55	1	55
56	1	56
58	1	58
59	1	59
60	2	120
62	1	62
65	1	65
66	1	66
67	1	67
68	1	68
69	3	207
70	2	140
72	3	216
76	1	76
77	1	77
85	1	85
Totals	34	1,993
Average age (years)		58.6

BLADDER

Males

36	1	36
39	1	39
40	1	40
42	1	42
43	1	43
44	1	44
45	1	45
46	1	46
47	1	47
48	2	96
49	2	98
50	2	100
51	2	102
52	4	208
53	1	53
54	5	270
55	4	220
56	7	392
57	5	285
58	1	58
59	5	295
60	1	60
61	4	244
62	5	310
63	4	252
64	2	128
65	5	325
66	8	528
68	4	272
69	3	207
70	3	210
71	6	426
72	3	216
73	5	365
74	1	74
75	5	375
76	3	228
77	1	77
78	1	78
79	2	158
80	2	160
81	1	81
82	3	246

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

BLADDER—Males (Continued)

Age	Number	Total Years of Life
83	2	166
85	2	170
86	1	86
87	1	87
90	2	180
Totals	129	8,268
Average age (years)		64.1
	Females	
3	1	3
37	1	37
40	1	40
43	1	43
44	1	44
45	1	45
50	1	50
51	1	51
52	3	156
53	1	53
54	4	216
55	2	110
56	3	168
57	3	171
58	1	58
59	2	118
60	4	240
61	2	122
63	4	252
65	1	65
66	1	66
68	3	204
69	3	207
70	1	70
72	3	216
73	1	73
74	2	148
75	1	75
76	2	152
79	1	79
80	1	80
81	2	162
84	2	168
86	1	86
Totals	62	3,828
Average age (years)		61.7

BRAIN

Age	Number	Total Years of Life
	Males	
37	1	37
39	1	39
43	1	43
49	1	49
51	1	51
59	1	59
62	1	62
87	1	87
Totals	8	427
Average age (years)		53.4
	Females	
30	1	30
43	1	43
45	1	45
47	2	94
48	1	48
52	1	52
53	2	106
54	1	54
59	1	59
60	2	120
71	1	71
73	1	73
84	1	84
Totals	16	879
Average age (years)		54.9

PROSTATE

	Males	
44	1	44
47	1	47
48	1	48
50	2	100
51	1	51
52	1	52
53	1	53
55	2	110
56	3	168
57	1	57
58	2	116
59	2	118
60	4	240
61	1	61
62	5	310
63	9	567
64	5	320
65	3	195
66	3	198
67	10	670
68	5	340
69	4	276
70	12	840
71	8	568
72	4	288
73	6	438

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

PROSTATE (Continued)

Age	Number	Total Years of Life
74	8	592
75	8	600
76	3	228
77	8	616
78	3	234
79	3	237
80	2	160
81	1	81
82	2	164
83	1	83
84	1	84
85	1	85
86	1	86
88	1	88
90	1	90
Totals	141	9,703
Average age (years)		68.8

BONES

	Males	
8	1	8
11	1	11
14	1	14
15	1	15
18	1	18
21	1	21
22	1	22
26	1	26
27	1	27
29	1	29
30	1	30
34	1	34
39	2	78
40	1	40
43	1	43
44	1	44
45	1	45
46	2	92
47	3	141
51	1	51
53	1	53
54	1	54
55	1	55
56	2	112
57	1	57
58	3	174
59	2	118
60	1	60
62	1	62
63	2	126
64	2	128
66	2	132
67	3	201
68	3	204
69	1	69
70	1	70
71	2	142
73	2	146
75	4	300
84	1	84
Totals	60	3,136
Average age (years)		52.3
Unknown	1	
Total totals	61	

	Females	
5	1	5
7	1	7
19	1	19
23	1	23
36	1	36
40	1	40
41	2	82
46	2	92
47	3	141
48	1	48
50	5	250
51	2	102
52	1	52
53	6	318
54	4	216
55	2	110
58	1	58
59	2	118
60	2	120
62	1	62
63	2	126
64	1	64
65	1	65
66	3	198
67	3	201
68	3	204
69	1	69
70	2	140
71	1	71
72	1	72
73	1	73
76	1	76
79	1	79
80	1	80
81	1	81
86	1	86
87	1	87
Totals	65	3,671
Average age (years)		56.5

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

TESTES

Males

Age	Number	Total Years of Life
2	1	2
4	1	4
28	1	28
30	1	30
31	2	62
40	2	80
47	2	94
56	1	56
62	1	62
64	1	64
67	1	67
69	1	69
Totals	15	618
Average age (years)		41.2

PENIS

Males

31	1	31
44	1	44
56	1	56
57	1	57
61	1	61
62	1	62
63	1	63
75	1	75
77	1	77
Totals	9	526
Average age (years)		58 4

HEART

Males

62	1	62
Totals	1	62
Average age (years)		62.0

Females

59	1	59
61	1	61
84	1	84
Totals	3	204
Average age (years)		68.0

APPENDIX

Females

Age	Number	Total Years of Life
54	1	54
79	1	79
Totals	2	133
Average age (years)		66.5

GENERAL

Males

1	1	1
13	1	13
19	1	19
21	1	21
26	1	26
30	1	30
33	1	33
43	1	43
46	2	92
47	1	47
48	3	144
50	1	50
51	1	51
53	1	53
55	1	55
59	1	59
60	2	120
61	1	61
62	2	124
63	3	189
66	2	132
69	2	138
70	1	70
71	1	71
72	1	72
75	1	75
76	1	76
Totals	36	1,865
Average age (years)		51.8

Females

38	2	76
44	4	176
46	2	92
47	3	141
48	1	48
50	1	50
51	1	51
52	1	52
53	1	53
54	1	54
55	1	55
56	3	168

Males and Females

Table 11 (By Single Years of Life and Average Age According to Organs and Parts) Continued

GENERAL—Females (Continued)

Age	Number	Total Years of Life
57	1	57
58	3	174
59	3	177
60	1	60
62	1	62
63	1	63
64	2	128
65	2	130
66	1	66
67	1	67
70	1	70
72	1	72
73	2	146
75	1	75
76	1	76
79	2	158
82	1	82
83	1	83
Totals	47	2,762
Average age (years)		58.8

Table 12

BY SURGICAL OPERATION, ACCORDING TO ORGANS AND PARTS

Parts	*Males*			*Females*		
	Yes	No	Unknown	Yes	No	Unknown
Lips	8	3	10	1	–	–
Tongue	18	14	38	1	1	2
Mouth	2	–	4	–	–	1
Jaw	11	20	16	3	3	7
Throat	3	10	27	–	–	7
Neck	27	13	24	7	17	12
Face	1	5	12	1	5	12
Eyes	1	1	2	1	1	4
Nose	3	–	1	–	1	2
Ear	2	–	1	3	–	6
Tonsil	1	1	4	1	1	1
Cheek	1	–	4	–	–	1
Hard palate	–	2	4	–	–	–
Chin	–	–	–	–	–	–
Pharynx	–	2	4	1	–	1
Oesophagus	52	36	55	8	11	17
Stomach	189	141	224	101	128	230
Liver and gall bladder	48	48	88	87	55	117
Mesentery and peritoneum	11	4	3	14	8	7
Intestines	106	46	81	151	96	151
Rectum and anus	75	20	43	60	30	49
Ovary and fallobian tubes	–	–	–	63	8	23
Uterus	–	–	–	190	137	238
Vulva and vagina	–	–	–	10	7	10
Others of this class	–	–	–	5	1	5
Breast	–	–	–	218	87	179
Skin	3	2	2	5	5	8
Larynx	17	5	29	2	1	5
Lungs and pleura	5	25	39	25	17	29
Pancreas	30	17	23	23	16	22
Kidneys	21	9	12	16	7	12
Prostate	56	28	56	–	–	–
Bladder	66	16	46	29	12	21
Brain	6	1	1	6	–	10
Bones	18	13	28	21	16	27

Males and Females

Table 12 (By Surgical Operation, According to Organs and Parts) Continued

Parts	*Males*			*Females*		
	Yes	No	Unknown	Yes	No	Unknown
Testes	7	2	6	–	–	–
Penis	3	3	2	–	–	–
Heart	–	–	1	–	1	2
Appendix	–	–	–	1	–	1
General	12	7	17	19	14	13
Totals	803	494	907	1,073	686	1,232

Table 13

BY MARITAL CONDITION (FEMALES), ACCORDING TO ORGANS AND PARTS

Parts	Married	Single	Unknown
Lips	–	1	–
Tongue	2	4	–
Mouth	1	–	–
Jaw	10	3	–
Throat	6	1	–
Neck	28	9	–
Face	14	4	–
Eyes	3	3	–
Nose	2	1	–
Ear	7	2	–
Head	1	–	–
Tonsil	2	1	–
Cheek	–	1	–
Hard palate	–	–	–
Chin	–	–	–
Pharynx	1	1	–
Oesophagus	32	5	–
Stomach	365	95	2
Liver and gall bladder	212	50	1
Mesentery and peritoneum	19	9	1
Intestines	314	88	–
Rectum and anus	123	23	–
Ovary	68	27	1
Uterus	500	72	–
Vulva and vagina	19	8	–
Others of this class	9	2	–
Breast	364	127	1
Skin	16	2	–
Larynx	8	1	–
Lung	52	21	–
Pancreas	56	7	–
Kidneys	27	7	–
Bladder	47	15	–
Brain	14	2	–
Bones	47	18	–
Heart	3	–	–
Appendix	1	1	–
General	37	11	–
Totals	2,410	622	6
Total per cent	79.5	20.5	

Total number of females—3,038.

Table 14

BY DURATION OF DISEASE, ACCORDING TO ORGANS AND PARTS

LIPS

Duration (months)	*Males* Number	Aggregate
3	1	3
4	1	4
11	1	11
12	4	48
14	1	14
18	3	54
24	3	72
30	1	30
Totals	15	236
Average (months)		15.7
Unknown	6	
Total total	21	

Duration (months)	*Females* Number	Aggregate
12	1	12
Totals	1	12
Average (months)		12.0

TONGUE

	Males	
2	2	4
3	1	3
4	2	8
6	5	30
7	3	21
8	2	16
9	3	27
10	1	10

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

TONGUE—Males (Continued)

Duration (months)	Number	Aggregate
12	13	156
14	1	14
15	1	15
17	1	17
18	3	54
24	6	144
31	1	31
36	2	72
48	1	48
72	1	72
Totals	49	742
Average (months)		15.1
Unknown	25	
Total total	74	
Females		
7	1	7
8	1	8
15	1	15
24	1	24
Totals	4	54
Average (months)		13.5
Unknown	2	
Total total	6	

MOUTH

Males		
12	1	12
24	1	24
Totals	2	36
Average (months)		18.0
Unknown	4	
Total total	6	
Females		
16	1	16
Totals	1	16
Average (months)		16.0

JAW

Males		
2	1	2
5	3	15
6	3	18
7	2	14
8	1	8
9	1	9
11	2	22
12	8	96
13	1	13
18	3	54
24	4	96
30	1	30
48	1	48
51	1	51
Totals	32	476
Average (month)		14.9
Unknown	16	
Total total	48	
Females		
6	3	18
8	1	8
12	1	12
24	1	24
Totals	6	62
Average (months)		10.3
Unknown	7	
Total total	13	

THROAT

Males		
1	1	1
3	4	12
4	2	8
5	3	15
6	6	36
7	1	7
8	1	8
10	1	10
12	7	84
18	3	54
20	1	20
24	1	24
Totals	31	279
Average (months)		9.0
Unknown	10	
Total total	41	
Females		
4	1	4
12	2	24
20	1	20
24	1	24
Totals	5	72
Average (months)		14.4
Unknown	2	
Total total	7	

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

NECK

Males

Duration (months)	Number	Aggregate
2	2	4
4	1	4
5	2	10
6	7	42
8	1	8
10	2	20
11	1	11
12	8	96
16	2	32
17	1	17
18	5	90
24	3	72
31	1	31
36	2	72
46	1	46
48	1	48
60	1	60
144	1	144
Totals	42	807
Average (months)		19.2
Unknown	22	
Total total	64	

Females

4	1	4
5	1	5
6	2	12
7	2	14
8	1	8
12	5	60
18	1	18
24	2	48
30	1	30
84	1	84
96	1	96
Totals	18	379
Average (months)		21.1
Unknown	19	
Total total	37	

FACE

Males

4	1	4
6	1	6
8	1	8
12	3	36
24	3	72
72	1	72
120	1	120
Totals	11	318
Average (months)		28.9
Unknown	9	
Total total	20	

Females

5	1	5
6	2	12
7	1	7
10	1	10
12	3	36
24	1	24
36	1	36
60	2	120
72	1	72
Totals	13	322
Average (months)		24.8
Unknown	5	
Total total	18	

EYES

Males

4	1	4
6	1	6
12	1	12
Totals	3	22
Average (months)		7.3
Unknown	1	
Total total	4	

Females

12	1	12
36	1	36
Totals	2	48
Average (months)		24.0
Unknown	4	
Total total	6	

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

NOSE

Males

Duration (months)	Number	Aggregate
2	1	2
24	1	24
216	1	216
Totals	3	242
Average (months)		80.7
Unknown	1	
Total total	4	

Females

36	1	36
60	1	60
Totals	2	96
Average (months)		48.0
Unknown	1	
Total total	3	

EAR

Males

6	2	12
36	1	36
Totals	3	48
Average (months)		16.0

Females

5	2	10
6	1	6
24	2	48
72	1	72
Totals	6	136
Average (months)		22.7
Unknown	3	
Total total	9	

HEAD

Males

60	1	60
Totals	1	60
Average (months)		60.0

TONSIL

Males

4	1	4
7	2	14
12	3	36
18	1	18
Totals	7	72
Average (months)		10.3

Females

Duration (months)	Number	Aggregate
4	1	4
12	1	12
16	1	16
Totals	3	32
Average (month)		10.7

CHEEK

Males

21	1	21
36	1	36
Totals	2	57
Average (months)		28.5
Unknown	3	
Total total	5	

Females

6	1	6
Totals	1	6
Average (months)		6.0

HARD PALATE

Males

7	1	7
10	1	10
12	1	12
19	1	19
Totals	4	48
Average (months)		12.0
Unknown	3	
Total total	7	

PHARYNX

2	1	2
6	2	12
12	1	12
24	1	24
Totals	5	50
Average (months)		10.0
Unknown	1	
Total total	6	

Females

24	1	24
Totals	1	24
Average (months)		24.0
Unknown	1	
Total total	2	

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

OESOPHAGUS

Males

Duration (months)	Number	Aggregate
1	1	1
2	2	4
3	9	27
4	12	48
5	3	15
6	17	102
7	1	7
8	3	24
9	5	45
10	4	40
12	20	240
14	1	14
15	2	30
16	1	16
24	2	48
30	1	30
36	2	72
Totals	86	763
Average (month)		8.9
Unknown	61	
Total total	147	

Females

4	1	4
5	1	5
6	3	18
7	1	7
8	2	16
10	1	10
12	5	60
13	1	13
15	1	15
16	1	16
18	2	36
24	2	48
25	1	25
36	1	36
54	1	54
240	1	240
Totals	25	603
Average (months)		24.1
Unknown	12	
Total total	37	

STOMACH

Males

Duration (months)	Number	Aggregate
1	5	5
2	13	26
3	22	66
4	17	68
5	9	45
6	47	282
7	12	84
8	14	112
9	7	63
10	5	50
11	1	11
12	85	1,020
14	5	70
15	2	30
16	1	16
18	20	360
20	1	20
21	1	21
22	1	22
24	35	840
26	1	26
30	4	120
36	10	360
42	1	42
48	2	96
60	1	60
72	2	144
96	1	96
120	2	240
Totals	327	4,395
Average (months)		13.4
Unknown	244	
Total total	571	

Females

1	2	2
2	5	10
3	17	51
4	12	48
5	8	40
6	47	282
7	6	42
8	8	64
9	7	63
10	6	60
11	2	22
12	73	876
13	1	13
14	2	28
15	1	15
16	2	32
17	2	34
18	14	252
19	2	38
20	1	20
24	42	1,008

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

STOMACH—Females (Continued)

Duration (months)	Number	Aggregate
30	2	60
33	1	30
36	9	324
42	1	42
48	2	96
60	2	120
96	1	96
120	2	240
240	1	240
Totals	281	4,248
Average (months)		15.1
Unknown	181	
Total total	462	

LIVER

Males

1	2	2
2	4	8
3	13	39
4	6	24
5	2	10
6	28	168
7	1	7
8	9	72
9	3	27
12	25	300
14	2	28
18	3	54
24	9	216
26	1	26
36	4	144
48	1	48
60	2	120
72	1	72
98	1	98
Totals	117	1,463
Average (month)		12.5
Unknown	74	
Total total	191	

Females

1	6	6
2	10	20
3	14	42
4	10	40
5	4	20
6	36	216
7	2	14
8	7	56
10	1	10
11	1	11
12	41	492
14	2	28
16	1	16
18	2	36
24	18	432
28	1	28
29	1	29
30	1	30
34	1	34
36	4	144
48	2	96
Totals	165	1,800
Average (months)		10.9
Unknown	98	
Total total	263	

PERITONEUM

Males

1	3	3
3	2	6
4	1	4
6	2	12
9	1	9
10	1	10
12	3	36
16	1	16
36	1	36
Totals	15	132
Average (months)		8.8
Unknown	5	
Total total	20	

Females

1	3	3
3	1	3
4	1	4
6	3	18
9	1	9
12	5	60
18	1	18
24	1	24
48	1	48
72	1	72
Totals	18	259
Average (months)		14.4
Unknown	11	
Total total	29	

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

INTESTINES

Males

Duration (months)	Number	Aggregate
1	3	3
2	8	16
3	6	18
4	5	20
5	5	25
6	17	102
7	1	7
8	5	40
9	4	36
10	4	40
12	30	360
13	2	26
14	2	28
15	1	15
16	3	48
18	3	54
21	1	21
22	1	22
24	9	216
36	4	144
48	3	144
60	2	120
120	1	120
Totals	120	1,625
Average (months)		13.5
Unknown	119	
Total total	239	

Females

1	4	4
2	3	6
3	8	24
4	9	36
5	5	25
6	32	192
7	6	42
8	8	64
9	8	72
10	4	40
11	5	55
12	43	516
13	1	13
15	1	15
17	1	17
18	10	180
19	1	19
23	1	23
24	42	1,008
25	1	25
30	3	90
36	13	468
41	1	41
42	2	84
60	2	120
72	2	144
132	1	132
240	1	240
Totals	218	3,695
Average (months)		16.9
Unknown	184	
Total total	402	

RECTUM

Males

1	4	4
2	5	10
3	2	6
4	2	8
5	3	15
6	8	48
7	1	7
8	4	32
9	4	36
10	2	20
11	1	11
12	15	180
13	1	13
14	1	14
15	2	30
17	1	17
18	6	108
22	1	22
23	1	23
24	15	360
30	2	60
36	7	252
42	1	42
72	2	144
84	1	84
96	1	96
48	1	48
Totals	94	1,690
Average (months)		18.0
Unknown	47	
Total total	141	

Females

1	5	5
2	2	4
3	1	3
4	1	4
5	1	5
6	11	66

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

RECTUM—Females (Continued)

Duration (months)	Number	Aggregate
8	3	24
9	6	54
10	2	20
12	18	216
14	1	14
15	2	30
16	1	16
18	7	126
20	1	20
24	18	432
25	1	25
27	1	27
30	1	30
33	1	33
36	6	216
60	2	120
72	1	72
Totals	93	1,562
Average (months)		16.8
Unknown	53	
Total total	146	

OVARY

	Females	
1	2	2
2	2	4
3	1	3
4	1	4
6	8	48
7	1	7
9	2	18
11	1	11
12	9	108
14	1	14
15	3	45
17	1	17
18	4	72
19	1	19
20	2	40
24	8	192
30	2	60
36	3	108
42	1	42
48	1	48
60	1	60
72	1	72
84	1	84
200	1	200
Totals	58	1,278
Average (months)		22.0
Unknown	38	
Total total	96	

UTERUS

	Females	
Duration (months)	Number	Aggregate
1	4	4
2	2	4
3	4	12
4	9	36
5	5	25
6	30	180
7	6	42
8	5	40
9	9	81
10	7	70
11	4	44
12	72	864
13	1	13
14	4	56
15	8	120
16	1	16
17	1	17
18	21	378
19	1	19
20	4	80
21	1	21
22	1	22
24	60	1,440
26	1	26
27	5	135
30	8	240
32	3	96
36	29	1,044
42	1	42
48	15	720
54	1	54
59	1	59
60	8	480
66	1	66
72	3	216
84	3	252
96	4	384
132	1	132
144	3	432
156	1	156
408	1	408
Totals	349	8,526
Average (months)		24.4
Unknown	223	
Total total	572	

VAGINA AND VULVA

	Females	
6	3	18
9	1	9
10	1	10
12	2	24

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

VAGINA AND VULVA (Continued)

Duration (months)	Number	Aggregate
13	1	13
14	1	14
18	2	36
20	1	20
22	1	22
23	1	23
24	3	72
36	2	72
60	1	60
Totals	20	393
Average (month)		19.7
Unknown	7	
Total total	27	

OTHERS OF THIS CLASS

Females

8	1	8
9	1	9
15	1	15
18	1	18
32	1	32
60	1	60
216	1	216
Totals	7	358
Average (months)		51.1
Unknown	4	
Total total	11	

BREAST

Females

1	1	1
2	3	6
3	8	24
4	4	16
5	5	25
6	11	66
7	5	35
8	5	40
9	4	36
10	4	40
11	2	22
12	43	516
13	2	26
14	4	56
15	2	30
16	3	48
17	1	17
18	21	378
20	2	40
21	2	42
22	2	44
24	72	1,728
25	2	50
26	1	26
27	2	54
28	1	28
30	10	300
32	2	64
36	30	1,080
37	1	37
38	1	38
41	3	123
42	3	126
45	1	45
48	12	576
84	1	84
Totals	276	5,867
Average (months)		21.3
Unknown	216	
Total total	492	

SKIN

Males

6	1	6
12	1	12
42	1	42
Totals	3	60
Average (months)		20.0
Unknown	4	
Total total	7	

Females

1	1	1
6	2	12
13	2	26
24	1	24
36	2	72
42	1	42
60	1	60
120	1	120
Totals	11	357
Average (months)		32.5
Unknown	7	
Total total	18	

LARYNX

Males

5	1	5
6	8	48
8	6	48

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

LARYNX—Males (Continued)

Duration (months)	Number	Aggregate
9	2	18
12	9	108
14	1	14
15	1	15
17	1	17
18	1	18
21	1	21
24	1	24
36	1	36
48	1	48
Totals	34	420
Average (months)		12.4
Unknown	20	
Total total	54	

Females

3	1	1
5	1	5
6	1	6
7	1	7
12	2	24
Totals	6	43
Average (months)		7.2
Unknown	3	
Total total	9	

LUNGS

Males

1	1	1
2	6	12
3	3	9
4	6	24
5	2	10
6	5	30
7	3	21
8	2	16
9	1	9
10	2	20
11	1	11
12	7	84
18	1	18
24	1	24
48	1	48
204	1	204
Totals	43	541
Average (months)		12.6
Unknown	27	
Total total	70	

Females

Duration (months)	Number	Aggregate
1	3	3
2	4	8
3	5	15
4	3	12
6	5	30
8	3	24
9	1	9
11	1	11
12	10	120
13	1	13
14	1	14
15	2	30
18	1	18
24	4	96
36	1	36
39	2	78
48	1	48
60	1	60
132	1	132
Totals	50	757
Average (months)		15.1
Unknown	23	
Total total	73	

PANCREAS

Males

2	4	8
3	2	6
4	4	16
6	6	36
7	3	21
8	1	8
10	4	40
12	6	72
18	1	18
20	1	20
24	4	96
26	1	26
30	1	30
Totals	38	397
Average (months)		10.4
Unknown	32	
Total total	70	

Females

1	3	3
2	3	6
3	3	9
5	2	10
6	6	36
7	1	7

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

PANCREAS—Females (Continued)

Duration (months)	Number	Aggregate
9	1	9
10	1	10
12	13	156
24	1	24
48	1	48
72	1	72
Totals	36	390
Average (months)		10.8
Unknown	27	
Total total	63	

KIDNEYS

	Males	
2	4	8
3	1	3
6	1	6
7	1	7
8	1	8
12	3	36
24	3	72
60	1	60
Totals	15	200
Average (months)		13.3
Unknown	27	
Total total	42	
	Females	
4	1	4
5	1	5
6	2	12
7	2	14
8	2	16
13	1	13
14	1	14
20	1	20
24	6	144
36	1	36
48	3	144
60	1	60
84	1	84
Totals	23	566
Average (months)		24.6
Unknown	11	
Total total	34	

PROSTATE

1	3	3
3	2	6
4	2	8
5	3	15
6	7	42
7	2	14
8	3	24
9	2	18
12	18	216
15	1	15
18	7	126
21	1	21
24	15	360
27	1	27
30	1	30
32	1	32
36	2	72
48	3	144
60	4	240
96	1	96
Totals	79	1,509
Average (months)		19.1
Unknown	62	
Total total	141	

BLADDER

	Males	
1	2	2
3	3	9
4	1	4
5	1	5
6	13	78
8	1	8
9	3	27
11	1	11
12	21	252
14	2	28
16	2	32
18	4	72
24	15	360
30	2	60
36	6	216
48	1	48
60	2	120
96	1	96
Totals	81	1,428
Average (months)		17.6
Unknown	48	
Total total	129	
	Females	
3	1	3
4	2	8
5	2	10
6	6	36

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

BLADDER—Females (Continued)

Duration (months)	Number	Aggregate
8	1	8
12	7	84
13	2	26
17	1	17
18	2	36
20	1	20
21	1	21
24	4	96
32	1	32
48	2	96
54	1	54
60	1	60
Totals	35	607
Average (months)		17.3
Unknown	27	
Total total	62	

BRAIN

	Males	
5	1	5
8	1	8
24	2	48
Totals	4	61
Average (months)		15.3
Unknown	4	
Total total	8	
	Females	
2	1	2
3	1	3
5	1	5
6	1	6
18	1	18
24	2	48
84	1	84
216	1	216
Totals	9	382
Average (months)		42.4
Unknown	7	
Total total	16	

BONES

	Males	
3	2	6
4	2	8
5	2	10
6	5	30
7	1	7
8	5	40
9	1	9
12	3	36
15	1	15
18	1	18
24	6	144
36	4	144
42	1	42
48	1	48
Totals	35	557
Average (months)		15.9
Unknown	26	
Total total	61	
	Females	
2	1	2
4	1	4
5	1	5
6	5	30
7	2	14
8	2	16
9	2	18
10	4	40
12	5	60
13	1	13
14	1	14
18	2	36
22	1	22
24	4	96
27	1	27
33	1	33
36	2	72
37	1	37
48	3	144
96	2	192
120	1	120
144	1	144
156	1	156
Totals	45	1,295
Average (months)		28.8
Unknown	20	
Total total	65	

TESTES

	Males	
2	1	2
3	1	3
5	1	5
6	1	6
8	1	8
12	2	24
14	1	14

Males and Females

Table 14 (By Duration of Disease, According to Organs and Parts) Continued

TESTES (Continued)

Duration (months)	Number	Aggregate
21	1	21
24	1	24
Totals	10	107
Average (months)		10.7
Unknown	5	
Total total	15	

PENIS

Males

5	2	10
6	1	6
7	1	7
9	1	9
24	1	24
240	1	240
Totals	7	296
Average (months)		42.3
Unknown	2	
Total total	9	

HEART

Males

5	1	5
Totals	1	5
Average (months)		5.0

Females

8	1	8
48	1	48
Totals	2	56
Average (months)		28.0
Unknown	1	
Total total	3	

APPENDIX

Females

Duration (months)	Number	Aggregate
4	1	4
Totals	1	4
Average (months)		4.0
Unknown	1	
Total total	2	

GENERAL

Males

2	1	2
3	3	9
6	2	12
7	2	14
8	3	24
12	4	48
14	1	14
18	1	18
60	1	60
Totals	18	201

Females

1	1	1
2	1	2
3	3	9
4	2	8
6	3	18
9	1	9
12	1	12
13	1	13
16	1	16
24	4	96
36	2	72
48	1	48
72	2	144
84	1	84
180	1	180
Totals	25	712

APPENDIX B

CANCER MORTALITY OF CHICAGO—1924

MALES AND FEMALES

Table 1

BY ORGANS AND PARTS

Parts	Total	Per 100,000	Males	Per 100,000	Females	Per 100,000
Lips	7	.3	5	.4	2	.2
Tongue	34	1.3	30	2.2	4	.3
Mouth	4	.2	3	.2	1	.1
Jaw	42	1.6	37	2.7	5	.4
Throat	9	.3	8	.6	1	.1
Neck	32	1.2	21	1.5	11	.8
Face	17	.6	8	.6	9	.7
Eyes	6	.2	2	.1	4	.3
Nose	5	.2	1	.1	4	.3
Ear	6	.2	3	.2	3	.2
Head	1	.0	1	.1	–	–
Tonsils	5	.2	3	.2	2	.2
Cheek	5	.2	4	.3	1	.1
Hard palate	2	.1	2	.1	–	–
Chin	–	–	–	–	–	–
Pharynx	8	.3	6	.4	2	.2
Oesophagus	141	5.2	111	8.8	30	2.3
Stomach	775	28.7	464	33.9	311	23.4
Liver and gall bladder	256	9.5	102	7.5	154	11.6
Mesentery and peritoneum	21	.8	8	.6	13	1.0
Intestines	296	11.0	142	10.4	154	11.6
Rectum and anus	141	5.2	78	5.8	63	4.7
Ovary	47	1.7	–	–	47	3.5
Uterus	346	12.8	–	–	346	26.0
Vulva and vagina	10	.4	–	–	10	.8
Others of this class	–	–	–	–	–	–
Breast	265	9.8	–	–	265	19.9
Skin	14	.5	8	.6	6	.5
Larynx	47	1.7	42	3.1	5	.4
Lungs and pleura	75	2.8	50	3.7	25	1.9
Pancreas	105	3.9	58	4.2	47	3.5
Kidneys	63	2.3	42	3.1	21	1.6
Prostate	86	3.2	86	6.3	–	–
Bladder	157	5.8	104	7.7	53	4.0
Brain	14	.5	6	.4	8	.6
Bones	71	2.6	36	2.6	35	2.6
Testes	6	.2	6	.4	–	–
Penis	7	.3	7	.5	–	–
Heart	4	.2	2	.1	2	.2
Appendix	2	.1	–	–	2	.2
General	31	1.1	9	.7	22	1.7
Totals	3,163	117.2	1,495	110.1	1,668	125.9

Males and Females

Table 1—Continued

BY ORGANS AND PARTS—SUMMARY

	Total	Per 100,000	Males	Per 100,000	Females	Per 100,000
Cancer of buccal cavity	324	12.0	245	17.9	79	5.9
Cancer of stomach and liver	1,031	38.2	566	41.3	465	34.9
Cancer of peritoneum, intestines and rectum	458	17.0	228	16.7	230	17.3
Cancer of female genital organs	403	14.9	–	–	403	30.3
Cancer of breast	265	9.8	–	–	265	10.9
Cancer of skin	14	.5	8	.6	6	.5
Cancer of other organs or of organs not specified	668	24.7	448	32.7	220	16.5
Totals	3,163	117.1	1,495	109.2	1,668	125.3

Table 2

BY MONTHS

Month	Total	Per cent.	Males	Per cent.	Females	Per cent.
January	292	9.23	120	8.03	172	10.31
February	232	7.34	102	6.82	130	7.80
March	269	8.50	132	8 83	137	8.21
April	272	8.60	127	8.49	145	8.69
May	282	8.92	134	8.96	148	8 87
June	258	8.16	126	8.43	132	7.92
July	236	7.46	107	7.16	129	7.74
August	286	9.04	146	9.77	140	8.39
September	258	8.16	125	8.36	133	7.97
October	273	8.63	121	8.09	152	9.11
November	238	7.52	125	8.36	113	6.78
December	267	8.44	130	8.70	137	8.21
Totals	3,163	100.00	1,495	100.00	1,668	100.00

Table 3

BY BIRTHPLACE OF MOTHER

Countries	Males	Females	Total	Total
U. S. A.	203	331	534	534
Canada	26	27	53	–
Nova Scotia	–	2	2	55
Mexico	1	1	2	–
Cuba	1	1	2	4
England	30	59	89	–
Wales and North Wales	5	1	6	–
Scotland	26	19	45	–
Ireland	185	222	407	547
Sweden	73	88	161	–
Norway	40	33	73	–
Denmark	20	15	35	–
Finland	1	4	5	–
Poland	92	80	172	–

Males and Females

Table 3 (By Birthplace of Mother) Continued

Countries	Males	Females	Total	Total
Russia	60	73	133	–
Armenia	–	1	1	–
Lithuania	22	15	37	617
Austria	30	21	51	–
Galicia	1	1	2	–
Hungary	11	19	30	–
Czecho-Slovakia	18	25	43	–
Persia	–	1	1	–
Turkey	1	–	1	–
Roumania	3	4	7	–
Jugo-Slavia	1	2	3	–
Dalmatia	1	–	1	–
Greece	5	–	5	–
Bohemia	45	42	87	–
Bavaria	2	1	3	–
Croatia	–	1	1	–
Moravia	2	1	3	238
Italy	31	34	65	–
France	6	5	11	–
Alsace Lorraine	–	3	3	–
Sicily	–	2	2	81
Switzerland	6	4	10	10
Germany	308	307	615	–
Belgium	8	2	10	–
Luxemburg	5	9	14	–
Holland	22	12	34	–
Prussia	–	2	2	675
Syria	1	–	1	1
Africa	–	1	1	1
Unknown	203	197	400	400
Totals	1,495	1,668	3,163	3,163

Table 4

BY METHOD OF DIAGNOSIS

	Total	Per cent.	Males	Per cent.	Females	Per cent.
No test	93	2.94	55	3.68	38	2.28
Clinical	1,748	55.26	771	51.57	977	58.57
Microscopic	168	5.31	59	3.95	109	6.53
Laboratory	132	4.17	57	3.81	75	4.50
Operation	284	8.98	138	9.23	146	8.75
Autopsy	219	6.92	130	8.70	89	5.34
X-ray	214	6.77	123	8.23	91	5.46
Clinical and laboratory	233	7.37	125	8.36	108	6.47
Histological	26	.82	15	1.00	11	.66
Pathological	28	.89	11	.74	17	1.02
Biopsy	10	.32	3	.20	7	.42
Necropsy findings	8	.25	8	.53	–	–
Totals	3,163	100.00	1,495	100.00	1,668	100.00

Males and Females

Table 5

BY LENGTH OF RESIDENCE AT PLACE OF DEATH

Days	Total	Total Days	Males	Total Days	Females	Total Days
1	6	6	5	5	1	1
2	2	4	2	4	–	–
3	6	18	2	6	4	12
4	6	24	4	16	2	8
5	3	15	2	10	1	5
6	5	30	4	24	1	6
7	10	70	6	42	4	28
8	1	8	–	–	1	8
9	1	9	1	9	–	–
10	4	40	1	10	3	30
11	2	22	–	–	2	22
12	3	36	2	24	1	12
13	–	–	–	–	–	–
14	5	70	4	56	1	14
15	2	30	–	–	2	30
16	1	16	1	16	–	–
17	2	34	–	–	2	34
18	2	36	2	36	–	–
19	2	38	2	38	–	–
20	–	–	–	–	–	–
21	3	63	1	21	2	42
22	1	22	1	22	–	–
23	–	–	–	–	–	–
24	–	–	–	–	–	–
25	–	–	–	–	–	–
26	–	–	–	–	–	–
27	1	27	–	–	1	27
28	1	28	–	–	1	28
29	–	–	–	–	–	–
30	2	60	–	–	2	60
Totals	71	706	40	339	31	367

Months	Total	Total Months	Males	Total Months	Females	Total Months
1	31	31	16	16	15	15
2	32	64	19	38	13	26
3	13	39	9	27	4	12
4	4	16	1	4	3	12
5	8	40	3	15	5	25
6	22	132	13	78	9	54
7	4	28	3	21	1	7
8	5	40	3	24	2	16
9	2	18	1	9	1	9
10	4	40	1	10	3	30
11	–	–	–	–	–	–
Totals	125	448	69	242	56	206

Males and Females

Table 5 (By Length of Residence at Place of Death) Continued

Years	Total	Total Years	Males	Total Years	Females	Total Years
1	40	40	21	21	19	19
2	77	154	26	52	51	102
3	34	102	17	51	17	51
4	39	156	11	44	28	112
5	42	210	24	120	18	90
6	28	168	12	72	16	96
7	34	238	14	98	20	140
8	31	248	9	72	22	176
9	16	144	2	18	14	126
10	77	770	31	310	46	460
11	31	341	11	121	20	220
12	55	660	22	264	33	396
13	24	312	7	91	17	221
14	40	560	18	252	22	308
15	67	1,005	30	450	37	555
16	24	384	8	128	16	256
17	30	510	16	272	14	238
18	34	612	18	324	16	288
19	16	304	8	152	8	152
20	128	2,560	57	1,140	71	1,420
21	28	588	14	294	14	294
22	36	792	22	484	14	308
23	28	644	12	276	16	368
24	28	672	15	360	13	312
25	89	2,225	39	975	50	1,250
26	18	468	4	104	14	364
27	21	567	11	297	10	270
28	21	588	8	224	13	364
29	18	522	3	87	15	435
30	191	5,730	98	2,940	93	2,790
31	40	1,240	15	465	25	775
32	68	2,176	33	1,056	35	1,120
33	52	1,716	26	858	26	858
34	33	1,122	13	442	20	680
35	142	4,970	71	2,485	71	2,485
36	37	1,332	16	576	21	756
37	41	1,517	23	851	18	666
38	47	1,786	19	722	28	1,064
39	25	975	11	429	14	546
40	243	9,720	119	4,760	124	4,960
41	26	1,066	12	492	14	574
42	53	2,226	26	1,092	27	1,134
43	49	2,107	23	989	26	1,118
44	37	1,628	23	1,012	14	616
45	72	3,240	48	2,160	24	1,080
46	18	828	10	460	8	368
47	14	658	6	282	8	376
48	21	1,008	10	480	11	528
49	11	539	4	196	7	343
50	107	5,350	54	2,700	53	2,650
51	26	1,326	11	561	15	765
52	53	2,756	27	1,404	26	1,352
53	32	1,696	15	795	17	901
54	31	1,674	12	648	19	1,026
55	33	1,815	16	880	17	935
56	13	728	5	280	8	448
57	17	969	9	513	8	456

Males and Females

Table 5 (By Length of Residence at Place of Death) Continued

Years	Total	Total Years	Males	Total Years	Females	Total Years
58	16	928	7	406	9	522
59	11	649	5	295	6	354
60	46	2,760	21	1,260	25	1,500
61	12	732	7	427	5	305
62	15	930	8	496	7	434
63	12	756	6	378	6	378
64	13	832	7	448	6	384
65	14	910	5	325	9	585
66	11	726	6	396	5	330
67	6	402	4	268	2	134
68	4	272	4	272	–	–
69	3	207	2	138	1	69
70	6	420	2	140	4	280
71	5	355	3	213	2	142
72	7	504	3	216	4	288
73	1	73	–	–	1	73
74	5	370	1	74	4	296
75	2	150	2	150	–	–
76	–	–	–	–	–	–
77	1	77	1	77	–	–
Totals	2,876	90,495	1,339	43,660	1,537	46,835
Totals in months		1,085,940		523,920		562,020
Days	71	706	40	339	31	367
Total months		24		11		12
Months	125	448	69	242	56	206
Known total	3,072		1,448		1,624	
Total months		1,086,412		524,173		562,238
Unknown	91		47		44	
Total total	3,163		1,495		1,668	
Average (years)		29.5		30.1		29.0

Table 6

BY AGE AT TIME OF DEATH

Years	Total	Years	Males	Years	Females	Total Years
1	1	1	1	1	–	–
2	3	6	1	2	2	4
3	4	12	2	6	2	6
5	1	5	–	–	1	5
6	4	24	3	18	1	6
7	1	7	1	7	–	–
8	2	16	1	8	1	8
10	1	10	–	–	1	10
11	1	11	–	–	1	11
13	3	39	2	26	1	13
14	2	28	1	14	1	14
15	1	15	1	15	–	–
16	3	48	2	32	1	16
18	1	18	–	–	1	18
19	1	19	–	–	1	19
20	2	40	1	20	1	20
21	5	105	4	84	1	21
22	6	132	5	110	1	22

Males and Females

Table 6 (By Age at Time of Death) Continued

Years	Total	Total Years	Males	Total Years	Females	Total Years
23	4	92	2	46	2	46
24	3	72	1	24	2	48
25	1	25	–	–	1	25
26	8	208	2	52	6	156
27	6	162	3	81	3	81
28	8	224	3	84	5	140
29	10	290	1	29	9	261
30	8	240	2	60	6	180
31	9	279	5	155	4	124
32	16	512	5	160	11	352
33	8	264	3	99	5	165
34	12	408	4	136	8	272
35	24	840	5	175	19	665
36	28	1,008	7	252	21	756
37	29	1,073	11	407	18	666
38	27	1,026	8	304	19	722
39	23	897	7	273	16	624
40	55	2,200	20	800	35	1,400
41	31	1,271	13	533	18	738
42	51	2,142	22	924	29	1,218
43	37	1,591	23	989	14	602
44	42	1,848	16	704	26	1,144
45	57	2,565	26	1,170	31	1,395
46	55	2,530	20	920	35	1,610
47	63	2,961	23	1,081	40	1,880
48	57	2,736	19	912	38	1,824
49	60	2,940	31	1,519	29	1,421
50	68	3,400	27	1,350	41	2,050
51	82	4,182	32	1,632	50	2,550
52	88	4,576	47	2,444	41	2,132
53	73	3,869	42	2,226	31	1,643
54	91	4,914	45	2,430	46	2,484
55	86	4,730	49	2,695	37	2,035
56	89	4,984	37	2,072	52	2,912
57	93	5,301	50	2,850	43	2,451
58	86	4,988	44	2,552	42	2,436
59	75	4,425	40	2,360	35	2,065
60	117	7,020	49	2,940	68	4,080
61	77	4,697	45	2,745	32	1,952
62	122	7,564	63	3,906	59	3,658
63	85	5,355	35	2,205	50	3,150
64	100	6,400	51	3,264	49	3,136
65	126	8,190	62	4,030	64	4,160
66	87	5,742	48	3,168	39	2,574
67	86	5,762	46	3,082	40	2,680
68	81	5,508	41	2,788	40	2,720
69	78	5,382	48	3,312	30	2,070
70	67	4,690	34	2,380	33	2,310
71	50	3,550	26	1,846	24	1,704
72	49	3,528	19	1,368	30	2,160
73	48	3,504	26	1,898	22	1,606
74	64	4,736	28	2,072	36	2,664
75	34	2,550	16	1,200	18	1,350
76	47	3,572	20	1,520	27	2,052
77	47	3,619	25	1,925	22	1,694
78	32	2,496	19	1,482	13	1,014
79	23	1,817	12	948	11	869

Males and Females

Table 6 (By Age at Time of Death) Continued

Years	Total	Total Years	Males	Total Years	Females	Total Years
80	31	2,480	15	1,200	16	1,280
81	25	2,025	14	1,134	11	891
82	21	1,722	8	656	13	1,066
83	12	996	7	581	5	415
84	9	756	4	336	5	420
85	13	1,105	2	170	11	935
86	9	774	3	258	6	516
87	5	435	2	174	3	261
88	5	440	5	440	–	–
89	5	445	2	178	3	267
90	1	90	–	–	1	90
94	1	94	–	–	1	94
96	1	96	–	–	1	96
Totals	3,163	183,449	1,495	88,049	1,668	95.400
Average age		58.00		58.90		57.19

SUMMARY

Years	Total	Per cent.	Males	Per cent.	Females	Per cent.
1– 9	16	.51	9	.60	7	.42
10–19	13	.41	6	.40	7	.42
20–29	53	1.68	22	1.47	31	1.86
30–39	184	5.82	57	3.81	127	7.61
40–49	508	16.06	213	14.25	295	17.69
50–59	831	26.27	413	27.63	418	25.05
60–69	959	30.32	488	32.64	471	28.24
70–79	461	14.57	225	15.05	236	14.15
80–89	135	4.27	62	4.15	73	4.38
90 & over	3	.09	–	–	3	.18
Totals	3,163	100.00	1,495	100.00	1,668	100.00

Table 7
BY TIME OF DEATH

Hour, A. M.	Total	Per cent.	Males	Per cent.	Females	Per cent.
1	110		45		65	
2	115		51		64	
3	124		61		63	
Total	349	11.83	157	11.31	192	12.28
4	119		53		66	
5	113		59		54	
6	138		74		64	
Total	370	12.54	186	13.40	184	11.77
7	100		47		53	
8	100		38		62	
9	140		63		77	
Total	340	11.52	148	10.66	192	12.28
10	129		64		65	
11	132		57		75	
12	98		38		60	
Total	359	12.17	159	11.46	200	12.80
Total A. M.	1,418		650		768	

Males and Females

Table 7 (By Time of Death) Continued

Hour, A. M.	Total	Per cent.	Males	Per cent.	Females	Per cent.
P. M.	129		57		72	
2	125		49		76	
3	136		68		68	
Total	390	13.22	174	12.54	216	13.82
4	145		78		67	
5	112		57		55	
6	126		60		66	
Total	383	12.98	195	14.05	188	12.03
7	129		61		68	
8	117		57		60	
9	135		56		79	
Total	381	12.91	174	12.54	207	13.24
10	150		75		75	
11	130		65		65	
12	99		55		44	
Total	379	12.84	195	14.05	184	11.77
Total P. M.	1,533		738		795	
Total A. M.	1,418		650		768	
Total P. M.	1,533		738		795	
Known total	2,951	100.01	1,388	100.01	1,563	99.99
Unknown	212		107		105	
Total total	3,163		1,495		1,668	

Table 8

BY DURATION OF DISEASE BY MONTHS

Months	Total	Total Months	Males	Total Months	Females	Total Months
1	38	38	16	16	22	22
2	79	158	37	74	42	84
3	149	447	87	261	62	186
4	124	496	69	276	55	220
5	92	460	44	220	48	240
6	448	2,688	244	1,464	204	1,224
7	57	399	33	231	24	168
8	157	1,256	94	752	63	504
9	84	756	40	360	44	396
10	71	710	36	360	35	350
11	33	363	16	176	17	187
12	595	7,140	284	3,408	311	3,732
13	25	325	10	130	15	195
14	45	630	16	224	29	406
15	34	510	9	135	25	375
16	26	416	14	224	12	192
17	12	204	3	51	9	153
18	176	3,168	67	1,206	109	1,962
19	12	228	3	57	9	171
20	11	220	6	120	5	100
21	9	189	2	42	7	147

Males and Females

Table 8 (By Duration of Disease by Months) Continued

Months	Total	Total Months	Males	Total Months	Females	Total Months
22	5	110	3	66	2	44
23	1	23	–	–	1	23
24	356	8,544	147	3,528	209	5,016
25	6	150	1	25	5	125
26	8	208	5	130	3	78
27	10	270	4	108	6	162
28	8	224	5	140	3	84
29	3	87	1	29	2	58
30	24	720	10	300	14	420
31	2	62	2	62	–	–
32	7	224	3	96	4	128
33	2	66	1	33	1	33
34	2	68	1	34	1	34
35	1	35	1	35	–	–
36	106	3,816	37	1,332	69	2,484
37	1	37	–	–	1	37
38	2	76	1	38	1	38
39	1	39	1	39	–	–
40	–	–	–	–	–	–
41	1	41	–	–	1	41
42	15	630	6	252	9	378
43	1	43	–	–	1	43
48	52	2,496	21	1,008	31	1,488
50	1	50	–	–	1	50
51	2	102	1	51	1	51
54	5	270	1	54	4	216
60	35	2,100	10	600	25	1,500
62	1	62	1	62	–	–
63	1	63	–	–	1	63
64	1	64	–	–	1	64
66	2	132	–	–	2	132
72	13	936	7	504	6	432
75	1	75	–	–	1	75
78	1	78	1	78	–	–
84	3	672	2	168	6	504
86	1	86	–	–	1	86
89	1	89	–	–	1	89
96	7	672	1	96	6	576
98	1	98	1	98	–	–
99	1	99	1	99	–	–
108	3	324	–	–	3	324
120	7	840	2	240	5	600
132	1	132	–	–	1	132
156	2	312	–	–	2	312
168	2	336	1	168	1	168
180	1	180	1	180	–	–
192	1	192	–	–	1	192
204	1	204	1	204	–	–
253	1	253	–	–	1	253
300	1	300	–	–	1	300
Known total	2,993	47,491	1,411	19,644	1,582	27,847
Unknown	170		84		86	
Total total	3,163		1,495		1,668	
Average (months)		15.9		13.9		17.6

Males and Females

Table 9

BY TREATMENT BY OPERATION, ACCORDING TO POPULATION

	Total	Rate per 100,000	Males	Rate per 100,000	Females	Rate per 100,000
Yes	1,209	44.8	541	39.5	668	50.2
No	1,880	69.6	912	66.6	968	72.7
Known method	3,089	114.4	1,453	106.1	1,636	122.9
Unknown	74		42		32	
Total total	3,163		1,495		1,668	

BY AUTOPSY DISPOSITION

Yes	276	10.2	165	12.1	111	8.3
No	2,865	106.1	1,320	96.4	1,545	116.1
Known method	3,141	116.3	1,485	108.5	1,656	124.4
Unknown	22		10		12	
Total total	3,163		1,495		1,668	

BY PLACE OF OCCURRENCE

Hospital	1,284	47.5	711	51.9	573	43.1
Institution	23	.9	7	.5	16	1.2
Residence	1,848	68.4	775	56.6	1,073	80.6
General	8	.3	2	.1	6	.5
Total	3,163	117.1	1,495	109.1	1,668	125.4

BY MARITAL CONDITION

	Females	Rate per 100,000
Married	859	64.6
Single	160	12.0
Widowed	629	47.3
Divorced	20	1.5
Total	1,668	125.4

Table 10

BY AGE AT TIME OF DEATH, BY ORGANS AND PARTS

LIPS

Males

Age	Number	Total Years of Life
57	1	57
65	1	65
67	1	67
79	2	158
Totals	5	347
Average age (years)		69.40

Females

62	1	62
82	1	82
Totals	2	144
Average age (years)		72.00

TONGUE

Males

Age	Number	Total Years of Life
38	1	38
40	4	160
42	2	84
43	2	86
45	1	45
46	1	46
48	1	48
49	1	49
51	1	51
53	2	106
54	1	54
55	2	110
56	1	56

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

TONGUE—Males (Continued)

Age	Number	Total Years of Life
58	2	116
59	2	118
60	3	180
62	2	124
65	1	65
Totals	30	1,536
Average age (years)		51.20
	Females	
62	1	62
65	1	65
70	2	140
Totals	4	267
Average age (years)		66.75

MOUTH

	Males	
61	1	61
68	1	68
78	1	78
Totals	3	207
Average age (years)		69.00
	Females	
38	1	38

JAW

	Males	
13	1	13
14	1	14
43	1	43
48	1	48
49	1	49
50	1	50
51	2	102
52	2	104
53	1	53
54	1	54
55	3	165
56	2	112
58	1	58
60	2	120
61	1	61
62	1	62
63	1	63
64	2	128
65	1	65
66	1	66
67	1	67
68	1	68
69	1	69
70	1	70
72	1	72
73	1	73
76	1	76
79	1	79
82	2	164
Totals	37	2,168
Average age (years)		58.59
	Females	
2	1	2
29	1	29
50	1	50
54	1	54
65	1	65
Totals	5	200
Average age (years)		40.00

THROAT

	Males	
42	1	42
51	2	102
54	1	54
55	1	55
57	1	57
60	1	60
68	1	68
Totals	8	438
Average age (years)		54.75
	Females	
29	1	29

NECK

	Males	
23	1	23
41	2	82
42	1	42
43	1	43
53	1	53
56	1	56
58	1	58
59	2	118
61	1	61
62	2	124
63	1	63
65	1	65
70	1	70
71	1	71
74	1	74
76	1	76
78	1	78
80	1	80
Totals	21	1,237
Average age (years)		58.90

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

NECK—(Continued)

Females

Age	Number	Total Years of Life
22	1	22
47	1	47
50	1	50
51	1	51
52	1	52
53	2	106
60	1	60
65	1	65
74	1	74
Totals	10	527
Average age (years)		52.70

FACE

Males

3	1	3
41	1	41
48	1	48
50	1	50
65	1	65
69	1	69
71	1	71
88	1	88
Totals	8	435
Average age (years)		54.38

Females

50	1	50
68	1	68
72	1	72
74	1	74
75	1	75
81	1	81
85	2	170
Totals	8	590
Average age (years)		73.75

EYES

Males

6	1	6
85	1	85
Totals	2	91
Average age (years)		45.50

Females

5	1	5
8	1	8
72	1	72
89	1	89
Totals	4	174
Average age (years)		43.50

NOSE

Males

Age	Number	Total Years of Life
70	1	70

Females

55	1	55
72	1	72
87	1	87
96	1	96
Totals	4	310
Average age (years)		77.50

EAR

Males

54	1	54
61	1	61
82	1	82
Totals	3	197
Average age (years)		65.67

Females

55	1	55
68	1	68
76	1	76
Totals	3	199
Average age (years)		66.33

HEAD

Males

69	1	69

TONSILS

Males

45	1	45
53	1	53
64	1	64
Totals	3	162
Average age (years)		54.00

Females

71	1	71
74	1	74
Totals	2	145
Average age (years)		72.50

CHEEK

Males

23	1	23
37	1	37
48	1	48
62	1	62
Totals	4	170
Average age (years)		42.50

Females

56	1	56

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

HARD PALATE

Males

Age	Number	Total Years of Life
69	1	69
76	1	76
Totals	2	145
Average age (years)		72.50

PHARYNX

Males

49	1	49
52	1	52
53	1	53
62	1	62
69	1	69
78	1	78
Totals	6	363
Average age (years)		60.50

Females

64	1	64
78	1	78
Totals	2	142
Average age (years)		71.00

OESOPHAGUS

Males

39	1	39
40	1	40
41	2	82
42	1	42
43	3	129
44	1	44
45	5	225
46	1	46
47	1	47
48	1	48
49	1	49
50	3	150
51	2	102
52	4	208
53	3	159
54	6	324
55	7	385
56	4	224
57	4	228
58	4	232
59	4	236
60	1	60
61	4	244
62	4	248
63	5	315
64	7	448
65	5	325
66	1	66
67	4	268
68	2	136
69	4	276
70	4	280
71	2	142
73	2	146
74	1	74
75	2	150
76	1	76
77	2	154
83	1	83
Totals	111	6,530
Average age (years)		58.83

Females

38	1	38
46	1	46
48	1	48
50	1	50
53	1	53
54	1	54
55	1	55
57	1	57
59	1	59
60	1	60
61	2	122
64	1	64
65	2	130
66	1	66
67	2	134
69	1	69
70	3	210
71	1	71
72	1	72
74	1	74
77	1	77
80	1	80
85	2	170
86	1	86
Totals	30	1,945
Average age (years)		64.83

STOMACH

Males

28	1	28
30	2	60
32	1	32
34	2	68
35	1	35
36	1	36
37	2	74
38	2	76
39	2	78
40	5	200
41	3	123

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

STOMACH—Males (Continued)

Age	Number	Total Years of Life
42	6	252
43	5	215
44	4	176
45	9	405
46	8	368
47	7	329
48	7	336
49	11	539
50	9	450
51	9	459
52	16	832
53	18	954
54	10	540
55	15	825
56	11	616
57	14	798
58	15	870
59	16	944
60	17	1,020
61	19	1,159
62	22	1,364
63	14	882
64	20	1,280
65	22	1,430
66	17	1,122
67	12	804
68	16	1,088
69	18	1,242
70	7	490
71	3	213
72	6	432
73	6	438
74	8	592
75	5	375
76	6	456
77	7	539
78	7	546
79	3	237
80	2	160
81	4	324
82	2	164
83	2	166
84	1	84
85	1	85
86	1	86
87	1	87
88	1	88
89	2	178
Totals	464	27,849
Average age (years)		60.02
	Females	
14	1	14
24	1	24
26	1	26
28	1	28
29	1	29
32	2	64
33	1	33
35	2	70
36	2	72
37	2	74
38	1	38
39	2	78
40	2	80
41	2	82
42	4	168
44	2	88
45	6	270
46	6	276
47	10	470
48	7	336
49	3	147
50	2	100
51	3	153
52	7	364
53	4	212
54	4	216
55	4	220
56	10	560
57	10	570
58	6	348
59	9	531
60	9	540
61	9	549
62	14	868
63	9	567
64	12	768
65	15	975
66	9	594
67	11	737
68	17	1,156
69	5	345
70	10	700
71	8	568
72	6	432
73	7	511
74	12	888
75	6	450
76	10	760
77	3	231
78	3	234
79	4	316
80	3	240
82	3	246
83	1	83
85	3	255
86	1	86
90	1	90
Totals	309	18,930
Average age (years)		61.26

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

LIVER AND GALL BLADDER

Males

Age	Number	Total Years of Life
21	1	21
36	1	36
37	2	74
38	1	38
39	1	39
40	4	160
43	4	172
44	1	44
45	1	45
46	2	92
47	1	47
48	1	48
49	2	98
50	1	50
51	4	204
52	2	104
53	2	106
54	1	54
55	1	55
56	3	168
57	6	342
58	3	174
59	6	354
60	3	180
61	3	183
62	3	186
63	3	189
64	2	128
65	1	65
66	6	396
67	4	268
68	1	68
69	2	138
70	3	210
71	5	355
73	3	219
74	3	222
76	1	76
77	3	231
78	1	78
80	1	80
83	2	166
84	1	84
Totals	102	6,047
Average age (years)		59.28

Females

6	1	6
29	1	29
31	1	31
32	1	32
34	1	34
35	1	35
37	2	74
38	1	38
39	2	78
40	2	80
42	1	42
44	2	88
45	1	45
46	4	184
47	1	47
48	2	96
49	2	98
50	4	200
51	8	408
52	3	156
53	3	159
54	4	216
55	2	110
56	4	224
57	6	342
58	5	290
59	3	177
60	9	540
61	2	122
62	4	248
63	5	315
64	7	448
65	8	520
66	6	396
67	4	268
68	4	272
69	7	483
70	2	140
71	2	142
72	3	216
73	3	219
74	5	370
75	4	300
76	1	76
77	2	154
80	3	240
81	1	81
82	2	164
83	1	83
84	1	84
85	2	170
86	2	172
87	1	87
Totals	159	9,629
Average age (years)		60.56

MESENTERY AND PERITONEUM

Males

13	1	13
38	1	38

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

MESENTERY AND PERITONEUM—

Males (Continued)

Age	Number	Total Years of Life
40	1	40
44	1	44
47	1	47
51	1	51
52	1	52
65	1	65
Totals	8	350
Average age (years)		43.75

Females

24	1	24
34	1	34
40	1	40
44	1	44
48	1	48
51	1	51
52	1	52
56	2	112
62	1	62
65	1	65
66	1	66
67	1	67
Totals	13	665
Average age (years)		51.15

INTESTINES

Males

8	1	8
20	1	20
22	1	22
26	1	26
27	1	27
29	1	29
31	2	62
32	1	32
33	3	99
34	1	34
35	1	35
37	1	37
39	1	39
41	1	41
42	3	126
44	5	220
45	2	90
46	1	46
47	3	141
48	2	96
49	3	147
52	3	156
54	3	162
55	8	440
56	4	224
57	6	342
58	3	174
59	5	295
60	5	300
61	6	366
62	2	124
63	3	189
64	4	256
65	8	520
66	4	264
67	3	181
68	3	204
69	3	207
70	4	280
71	4	284
72	3	146
73	2	216
74	3	222
75	3	225
76	3	228
77	1	77
78	1	78
80	3	240
81	4	324
84	1	84
86	1	86
Totals	142	8,271
Average age (years)		58.25

Females

23	1	23
27	2	54
28	2	56
29	2	58
31	1	31
32	1	32
34	1	34
36	2	72
37	1	37
38	2	76
40	3	120
42	3	126
43	1	43
44	4	176
45	2	90
46	2	92
47	5	235
48	3	144
50	1	50
51	6	306
52	1	52
53	4	212
54	5	270
55	3	165
56	2	112
57	3	171

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

INTESTINES—Females (Continued)

Age	Number	Total Years of Life
58	6	348
59	3	177
60	5	300
61	3	183
62	6	372
63	3	189
64	5	320
65	7	455
66	3	198
67	3	201
68	4	272
69	6	414
70	6	420
71	2	142
72	5	360
73	1	73
74	6	444
75	1	75
76	2	152
77	2	154
78	1	78
80	4	320
81	1	81
82	3	246
83	2	166
84	1	84
94	1	94
Totals	155	9,155
Average age (years)		59.06

RECTUM AND ANUS

	Males	
21	1	21
27	1	27
41	1	41
43	1	43
45	1	45
46	1	46
47	1	47
48	1	48
49	1	49
50	2	100
51	1	51
52	6	312
53	4	212
54	1	54
55	2	110
56	3	168
57	2	114
58	5	290
59	1	59
60	4	240
62	4	248
64	2	128
65	3	195
66	4	264
67	3	201
68	2	136
69	4	276
70	5	350
73	1	73
74	3	222
76	1	76
77	1	77
78	1	78
80	2	160
81	1	81
87	1	87
Totals	78	4,729
Average age (years)		60.63

	Females	
27	1	27
33	1	33
35	2	70
36	2	72
37	1	37
40	3	120
42	1	42
43	1	43
44	1	44
45	1	45
49	1	49
50	2	100
51	3	153
52	2	104
53	1	53
54	1	54
55	5	275
56	3	168
57	1	57
58	3	174
60	3	180
61	1	61
62	1	62
63	2	126
64	1	64
65	3	195
66	1	66
67	2	134
69	2	138
70	1	70
76	2	152
77	1	77
79	1	79
80	1	80
81	2	162

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

RECTUM AND ANUS—
Females (Continued)

Age	Number	Total Years of Life
82	1	82
85	1	85
86	2	172
Totals	64	3,705
Average age (years)		57.89

OVARY
Females

32	1	32
35	1	35
37	1	37
38	2	76
39	2	78
40	1	40
43	1	43
44	2	88
45	3	135
47	1	47
48	1	48
49	3	147
50	3	150
51	1	51
52	1	52
55	1	55
56	1	56
58	1	58
60	6	360
62	2	124
64	4	256
65	1	65
67	1	67
68	1	68
73	2	146
82	1	82
84	1	84
Totals	46	2,480
Average age (years)		53.91

UTERUS
Females

25	1	25
26	1	26
30	3	90
31	1	31
32	4	128
33	2	66
34	2	68
35	6	210
36	8	288
37	4	148
38	6	228
39	5	195
40	12	480
41	10	410
42	11	462
43	6	258
44	7	308
45	9	405
46	11	506
47	9	423
48	14	672
49	13	637
50	12	600
51	11	561
52	10	520
53	4	212
54	11	594
55	6	330
56	13	728
57	7	399
58	9	522
59	10	590
60	16	960
61	5	305
62	11	682
63	12	756
64	6	384
65	9	585
66	8	528
67	7	469
68	3	204
69	3	207
70	2	140
71	4	284
72	2	144
74	3	222
75	3	225
76	3	228
77	5	385
78	4	312
79	2	158
80	1	80
81	2	162
85	1	85
Totals	350	18,625
Average age (years)		53.21

VULVA AND VAGINA
Females

36	1	36
50	1	50
52	1	52
53	1	53
54	1	54
56	2	112
60	1	60

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

VULVA AND VAGINA—(Continued)

Age	Number	Total Years of Life
68	1	68
72	1	72
Totals	10	557
Average age (years)		55.70

BREAST

Females

26	4	104
28	2	56
29	1	29
30	2	60
31	1	31
32	1	32
34	3	102
35	4	140
36	4	144
37	4	148
38	4	152
39	3	117
40	9	360
41	4	164
42	6	252
43	5	215
44	6	264
45	3	135
46	7	322
47	10	470
48	6	288
49	6	294
50	8	400
51	8	408
52	10	520
53	6	318
54	11	594
55	8	440
56	7	392
57	7	399
58	10	580
59	5	295
60	8	480
61	6	366
62	5	310
63	11	693
64	7	448
65	7	455
66	5	330
67	5	335
68	3	204
69	2	138
70	2	140
71	1	71
72	4	288
73	5	365
74	2	148
75	1	75
76	3	228
77	4	308
78	2	156
79	4	316
81	2	162
82	1	82
83	1	83
84	1	84
87	1	87
89	1	89
Totals	269	14,666
Average age (years)		54.52

SKIN

Males

21	1	21
41	1	41
52	1	52
54	1	54
58	1	58
66	1	66
80	1	80
84	1	84
Totals	8	456
Average age (years)		57.00

Females

51	1	51
54	1	54
61	1	61
76	1	76
84	1	84
89	1	89
Totals	6	415
Average age (years)		69.17

LARYNX

Males

24	1	24
40	2	80
43	1	43
46	1	46
47	2	94
48	1	48
50	2	100
51	2	102
53	1	53
54	1	54
55	1	55
56	1	56
57	2	114

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

LARYNX—Males (Continued)

Age	Number	Total Years of Life
59	1	59
60	2	120
61	1	61
62	1	62
64	1	64
65	2	130
66	1	66
67	4	268
68	2	136
72	1	72
73	4	292
75	1	75
78	1	78
79	2	158
Totals	42	2,510
Average age (year)		59.76
	Females	
29	1	29
35	1	35
45	1	45
62	1	62
72	1	72
Totals	5	243
Average age (years)		48.60

LUNGS AND PLEURA

	Males	
28	1	28
31	1	31
32	1	32
35	2	70
36	1	36
37	2	74
39	1	39
40	1	40
42	1	42
43	2	86
45	2	90
46	1	46
47	2	94
50	1	50
51	5	255
52	1	52
53	2	106
54	1	54
55	1	55
56	1	56
57	2	114
58	2	116
61	2	122
62	1	62
64	1	64
65	1	65
66	3	198
67	4	268
69	1	69
74	2	148
79	1	79
Totals	50	2,641
Average age (year)		52.82
	Females	
3	1	3
18	1	18
33	1	33
40	1	40
42	1	42
45	1	45
47	1	47
51	1	51
52	1	52
53	2	106
57	1	57
59	1	59
60	1	60
61	1	61
62	3	186
63	1	63
64	1	64
70	1	70
71	1	71
74	1	74
Totals	23	1,202
Average age (years)		52.26

PANCREAS

	Males	
34	1	34
35	1	35
36	2	72
38	1	38
42	2	84
43	2	86
44	1	44
45	1	45
46	1	46
47	1	47
48	1	48
49	3	147
50	1	50
51	2	102
52	2	104
54	3	162

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

PANCREAS—Males (Continued)

Age	Number	Total Years of Life
55	1	55
56	1	56
57	5	285
59	1	59
60	2	120
61	1	61
62	2	124
63	1	63
64	4	256
65	2	130
66	3	198
67	2	134
68	2	136
69	1	69
70	1	70
73	2	146
74	1	74
78	1	78
Totals	58	3,258
Average age (years)		56.17

Females

41	1	41
47	1	47
48	1	48
49	1	49
50	1	50
51	1	51
53	2	106
54	1	54
55	3	165
56	1	56
57	1	57
59	1	59
60	2	120
62	2	124
63	1	63
64	4	256
65	5	325
66	2	132
67	2	134
68	1	68
69	1	69
72	3	216
73	3	219
75	2	150
76	1	76
78	1	78
82	1	82
Totals	46	2,895
Average age (years)		62.93

KIDNEYS

Males

Age	Number	Total Years of Life
1	1	1
2	1	2
3	1	3
6	1	6
22	1	22
27	1	27
31	1	31
33	1	33
38	1	38
39	1	39
40	1	40
42	1	42
43	1	43
44	1	44
47	1	47
49	3	147
50	2	100
52	2	104
53	1	53
54	3	162
55	1	55
56	1	56
57	1	57
58	1	58
60	2	120
62	2	124
63	3	189
65	2	130
74	2	148
78	1	78
Totals	42	1,999
Average age (years)		47.60

Females

37	1	37
42	1	42
44	1	44
45	1	45
48	1	48
51	2	102
52	1	52
55	2	110
56	1	56
57	2	114
61	1	61
62	1	62
63	1	63
66	1	66
68	1	68
70	1	70

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

KIDNEYS—Females (Continued)

Age	Number	Total Years of Life
71	1	71
78	1	78
Totals	21	1,189
Average age (years)		56.62

PROSTATE

Age	Number	Total Years of Life
	Males	
22	1	22
41	1	41
45	1	45
49	1	49
50	1	50
51	1	51
52	1	52
54	1	54
55	2	110
56	3	168
57	2	114
58	1	58
59	2	118
60	2	120
61	2	122
62	5	310
63	1	63
64	2	128
65	4	260
66	1	66
67	4	268
68	6	408
69	3	207
70	2	140
71	6	426
72	3	216
73	3	219
74	1	74
75	3	225
76	4	304
77	6	462
78	2	156
79	2	158
80	1	80
81	3	243
82	1	82
83	1	83
Totals	86	5,752
Average age (years)		66.88

BLADDER

Age	Number	Total Years of Life
	Males	
26	1	26
36	2	72
40	1	40
42	3	126
44	1	44
45	1	45
46	1	46
49	2	98
52	3	156
53	1	53
54	6	324
55	2	110
56	1	56
57	2	114
58	3	174
59	2	118
60	1	60
61	2	122
62	7	434
63	2	126
64	4	256
65	5	325
66	3	198
67	5	335
68	3	204
69	6	414
70	4	280
71	3	213
72	3	216
73	2	146
74	3	222
75	1	75
76	1	76
77	4	308
78	1	78
79	1	79
80	5	400
81	1	81
82	2	164
83	1	83
86	1	86
88	1	88
Totals	104	6,671
Average age (years)		64.14
	Females	
38	1	38
39	1	39
42	1	42
45	1	45
46	1	46
50	1	50
51	2	102
53	1	53
54	3	162
56	2	112
57	1	57
58	1	58

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

BLADDER—Females (Continued)

Age	Number	Total Years of Life
59	1	59
60	4	240
62	3	186
63	1	63
65	3	195
66	2	132
67	1	67
68	1	68
69	1	69
70	2	140
71	4	284
72	1	72
73	1	73
74	1	74
76	2	152
77	1	77
80	1	80
81	2	162
Totals	48	2,997
Average age (years)		62.44

BRAIN

Males

16	1	16
22	1	22
34	1	34
42	1	42
48	1	48
53	1	53
Totals	6	215
Average age (years)		35.83

Females

19	1	19
36	1	36
37	1	37
46	1	46
51	1	51
52	1	52
59	1	59
77	1	77
Totals	8	377
Average age (years)		47.13

BONES

Males

6	1	6
7	1	7
15	1	15
22	1	22
24	1	24
31	1	31
32	1	32
37	2	74
44	1	44
45	1	45
46	2	92
47	1	47
50	2	100
52	1	52
53	1	53
54	2	108
55	2	110
57	2	114
58	1	58
59	i	59
62	2	124
64	1	64
65	1	65
66	1	66
70	1	70
71	1	71
72	1	72
77	1	77
81	1	81
Totals	36	1,783
Average age (years)		49.53

Females

2	1	2
3	1	3
11	1	11
13	1	13
16	1	16
20	1	20
29	1	29
30	1	30
32	1	32
36	1	36
37	1	37
40	1	40
41	1	41
46	1	46
47	1	47
50	2	100
52	1	52
54	2	108
56	2	112
57	1	57
58	1	58
60	3	180
62	3	186
63	3	189

Males and Females

Table 10 (By Age at Time of Death, by Organs and Parts) Continued

BONES—Females (Continued)

Age	Number	Total Years of Life
68	2	136
69	2	138
77	1	77
Totals	38	1,796
Average age (years)		47.26

TESTES

	Males	
16	1	16
21	1	21
28	1	28
41	1	41
53	1	53
61	1	61
Totals	6	220
Average age (years)		36.67

PENIS

	Males	
47	1	47
50	1	50
66	1	66
68	1	68
69	1	69
72	1	72
88	1	88
Totals	7	460
Average age (years)		65.91

HEART

	Males	
53	1	53
62	1	62
Totals	2	115
Average age (years)		57.50

Age	Number	Total Years of Life
	Females	
80	1	80

GENERAL

	Males	
48	1	48
49	1	49
52	1	52
54	1	54
58	2	116
60	1	60
63	1	63
75	1	75
Totals	9	517
Average age (years)		57.44

	Females	
21	1	21
23	1	23
34	1	34
35	2	70
45	2	90
46	1	46
48	1	48
56	1	56
57	1	57
63	1	63
67	1	67
70	1	70
74	2	148
76	1	76
80	1	80
Totals	18	949
Average age (years)		52.72

Table 11

BY KNOWN DURATION OF DISEASE IN MONTHS, ACCORDING TO ORGANS AND PARTS

LIPS

Duration (Months)	*Males* Number	Aggregate
10	1	10
18	1	18
38	1	38
60	1	60
84	1	84
Totals	5	210
Average (months)		42.00

Duration (Months)	*Females* Number	Aggregate
36	1	36
60	1	60
Totals	2	96
Average (months)		48.00

TONGUE

	Males	
6	3	18
8	2	16

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

TONGUE—Males (Continued)

Duration (months)	Number	Aggregate
9	1	9
10	1	10
12	7	84
13	1	13
14	2	28
18	2	36
19	1	19
20	1	20
24	3	72
28	2	56
32	2	64
Totals	28	445
Average (months)		15.89
Unknown	2	
Total total	30	
Females		
6	1	6
12	1	12
18	2	36
Totals	4	54
Average (months)		13.50

MOUTH

Males		
12	1	12
24	1	24
36	1	36
Totals	3	72
Average (months)		24.00
Females		
7	1	7

JAW

Males		
1	1	1
2	1	2
4	1	4
5	4	20
6	3	18
7	1	7
8	2	16
9	2	18
10	1	10
11	1	11
12	8	96
15	1	15
18	2	36
24	4	96
42	1	42
Totals	33	392
Average (months)		11.88
Unknown	4	
Total total	37	
Females		
4	2	8
12	2	24
18	1	18
Totals	5	50
Average (months)		10.00

THROAT

Males		
5	2	10
6	2	12
8	1	8
16	1	16
24	1	24
Totals	7	70
Average (months)		10.00
Unknown	1	
Total total	8	
Females		
14	1	14

NECK

Males		
2	3	6
3	2	6
5	2	10
6	1	6
7	3	21
8	2	16
11	1	11
12	3	36
18	2	36
36	1	36
Totals	20	184
Average (months)		9.20
Unknown	1	
Total total	21	
Females		
2	1	2
3	1	3
5	2	10
8	2	16

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

NECK—Females (Continued)

Duration (months)	Number	Aggregate
14	1	14
24	2	48
156	1	156
Totals	10	249
Average (months)		24.90

FACE

	Males	
6	1	6
8	1	8
12	1	12
24	1	24
36	1	36
48	1	48
72	1	72
204	1	204
Totals	8	410
Average (months		51.25
	Females	
5	1	5
10	1	10
12	1	12
18	1	18
24	1	24
36	2	72
108	1	108
Totals	8	249
Average (months)		31.13

EYES

	Males	
12	1	12
	Females	
6	1	6
6	1	6
9	1	9
240	1	240
Totals	4	261
Average (months)		65.25

NOSE

	Males	
24	1	24
	Females	
2	1	2
24	1	24
48	1	48
66	1	66
Totals	4	140
Average (months)		35.00

Duration (months)	Number	Aggregate
EAR		
	Males	
12	1	12
14	1	14
36	1	36
Totals	3	62
Average (months)		20.67
	Females	
4	1	4
12	1	12
24	1	24
Totals	3	40
Average (months)		13.33

HEAD

	Males	
2	1	2

TONSILS

	Males	
3	1	3
6	1	6
30	1	30
Totals	3	39
Average (months)		13.00
	Females	
2	1	2
10	1	10
Totals	2	12
Average (months)		6.00

CHEEK

	Males	
6	1	6
12	1	12
24	2	48
Totals	4	66
Average (months)		16.50
	Females	
192	1	192

HARD PALATE

	Males	
2	1	2
18	1	18
Totals	2	20
Average (months)		10.00

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

PHARYNX

Males

Duration (months)	Number	Aggregate
3	1	3
4	1	4
12	2	24
16	1	16
Totals	5	47
Average (months)		9.40
Unknown	1	
Total total	6	

Females

3	1	3
18	1	18
Totals	2	21
Average (months)		10.50

OESOPHAGUS

Males

1	1	1
2	2	4
3	5	15
4	6	24
5	6	30
6	27	162
7	4	28
8	3	24
9	4	36
10	5	50
11	1	11
12	21	252
13	3	39
14	2	28
16	2	32
18	3	54
24	3	72
27	1	27
31	1	31
35	1	35
48	2	96
78	1	78
Totals	104	1,129
Average (months)		10.86

Females

1	1	1
3	3	9
4	1	4
6	8	48
8	2	16
9	1	9
11	1	11
12	1	12
13	2	26
14	1	14
15	2	30
18	1	18
19	1	19
24	3	72
48	1	48
Totals	29	337
Average (months)		11.62
Unknown	1	
Total total	30	

STOMACH

Males

1	8	8
2	9	18
3	27	81
4	16	64
5	9	45
6	87	522
7	8	56
8	34	272
9	12	108
10	17	170
11	5	55
12	90	1,080
13	3	39
14	2	28
15	1	15
16	5	80
17	1	17
18	25	450
20	2	40
24	48	1,152
25	1	25
26	2	52
27	2	54
28	1	28
36	11	396
39	1	39
42	2	84
48	7	336
60	4	240
62	1	62
168	1	168
180	1	180
Totals	443	5,964
Average (months)		13.46
Unknown	21	
Total total	464	

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

STOMACH (Continued)

Females

Duration (Months)	Number	Aggregate
1	4	4
2	5	10
3	11	33
4	14	56
5	9	45
6	44	264
7	7	49
8	12	96
9	13	117
10	5	50
11	4	44
12	68	816
13	3	39
14	12	168
15	7	105
18	14	252
19	5	95
20	1	20
22	1	22
24	31	744
27	2	54
28	3	84
29	1	29
30	2	60
36	7	252
43	1	43
48	2	96
60	3	180
72	1	72
108	1	108
Totals	293	4,007
Average (months)		13.68
Unknown	16	
Total total	309	

LIVER AND GALL BLADDER

Males

1	1	1
2	6	12
3	15	45
4	8	32
6	12	72
7	1	7
8	4	32
9	3	27
10	1	10
11	2	22
12	15	180
13	1	13
15	1	15
18	3	54
24	13	312
27	1	27
29	1	29
30	1	30
32	1	32
36	2	72
42	1	42
48	1	48
Totals	94	1,114
Average (months)		11.85
Unknown	8	
Total total	102	

Females

1	2	2
2	9	18
3	7	21
4	7	28
5	4	20
6	25	150
7	3	21
8	7	56
9	3	27
10	4	40
12	30	360
13	2	26
14	4	56
15	1	15
18	11	198
20	1	20
22	1	22
24	15	360
27	1	27
56	4	144
48	2	96
60	3	180
96	1	96
225	1	225
Totals	148	2,208
Average (months)		14.92
Unknown	11	
Total total	159	

MESENTERY AND PERITONEUM

Males

3	1	3
5	1	5
6	2	12
8	1	8

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

MESENTERY AND PERITONEUM—
Males (Continued)

Duration (months)	Number	Aggregate
15	1	15
20	1	20
24	1	24
Totals	8	87
Average (months)		10.88
	Females	
2	1	2
3	1	3
6	3	18
7	1	7
9	1	9
10	2	20
11	1	11
12	1	12
24	1	24
48	1	48
Totals	13	154
Average (months)		11.85

INTESTINES

	Males	
1	3	3
2	6	12
3	6	18
4	5	20
5	2	10
6	25	150
7	4	28
8	10	80
9	5	45
10	3	30
11	1	11
12	31	372
14	1	14
15	1	15
16	1	16
17	1	17
18	4	72
24	4	96
30	1	30
36	5	180
99	1	99
Totals	120	1,318
Average (months)		10.98
Unknown	22	
Total total	142	

Duration (months)	Number	Aggregate
	Females	
1	5	5
2	6	12
3	3	9
4	5	20
5	10	50
6	21	126
7	7	49
8	3	24
9	2	18
10	4	40
11	2	22
12	30	360
14	2	28
15	1	15
18	12	216
21	2	42
24	16	384
30	2	60
36	6	216
38	1	38
42	1	42
60	1	60
84	1	84
86	1	86
132	1	132
Totals	145	2,138
Average (months)		14.74
Unknown	10	
Total total	165	

RECTUM AND ANUS

	Males	
1	1	1
2	1	2
3	3	9
4	3	12
6	11	66
7	1	7
8	2	16
9	2	18
10	2	20
11	1	11
12	16	192
14	1	14
17	1	17
18	7	126
22	1	22
24	14	336
30	2	60
36	3	108

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

RECTUM AND ANUS—Males (Continued)

Duration (Months)	Number	Aggregate
42	2	84
48	2	96
51	1	51
Totals	77	1,268
Average (months)		16.47
Unknown	1	
Total total	78	

Females

2	1	2
3	2	6
4	1	4
6	10	60
8	6	48
11	2	22
12	11	132
13	1	13
14	2	28
17	1	17
18½	6	108
24	9	216
25	1	25
32	1	32
36	3	108
48	2	96
60	1	60
63	1	63
72	1	72
Totals	62	1,112
Average (months)		17.94
Unknown	2	
Total total	64	

OVARY

Females

1	1	1
2	2	4
3	5	15
4	2	8
6	5	30
7	1	7
8	2	16
9	2	18
10	1	10
12	8	96
13	2	26
16	1	16
18	1	18
24	7	168
41	1	41
43	2	96
54	1	54
66	1	66
Totals	45	690
Average (months)		15.33
Unknown	1	
Total total	46	

UTERUS

Females

1	5	5
2	4	8
3	9	27
4	7	28
5	13	65
6	36	216
7	3	21
8	10	80
9	10	90
10	6	60
11	3	33
12	81	972
13	1	13
14	4	56
15	4	60
16	4	64
17	2	34
18	31	558
19	1	19
20	1	20
21	2	42
24	47	1,128
25	2	50
27	2	54
29	1	29
30	3	90
32	1	32
36	12	432
37	1	37
42	2	84
48	4	192
60	8	480
64	1	64
72	1	72
96	1	96
253	1	253
300	1	300
Totals	325	5,864
Average (months)		18.04
Unknown	25	
Total total	350	

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

VULVA AND VAGINA

Females

Duration (months)	Number	Aggregate
4	1	4
5	1	5
12	3	36
16	1	16
18	3	54
24	1	24
Totals	10	139
Average (months)		13.90

BREAST

Females

1	2	2
2	1	2
3	4	12
5	1	5
6	12	72
7	2	14
8	6	48
9	4	36
10	3	30
11	5	55
12	44	528
13	3	39
14	1	14
15	4	60
16	3	48
17	4	68
18	17	306
19	2	38
20	2	40
21	1	21
23	1	23
24	56	1,344
25	1	25
26	3	78
27	1	27
30	4	120
32	2	64
34	1	34
36	20	720
42	5	210
48	12	576
50	1	50
51	1	51
54	3	162
60	7	420
72	3	216
75	1	75
84	3	252
89	1	89
96	4	384
108	1	108
120	4	480
156	1	156
168	1	168
Totals	258	7,270
Average (months)		28.18
Unknown	11	
Total total	269	

SKIN

Males

3	1	3
4	1	4
6	2	12
8	1	8
18	2	36
72	1	72
Totals	8	135
Average (months)		16.88

Females

6	1	6
8	2	16
10	1	10
12	1	12
30	1	30
Totals	6	74
Average (months)		12.33

LARYNX

Males

2	1	2
3	4	12
4	2	8
5	1	5
6	9	54
8	4	32
9	2	18
10	1	10
12	4	48
16	1	16
18	1	18
24	3	72
36	1	36
48	3	144
72	1	72
96	1	96
Totals	39	643
Average (months)		16.49
Unknown	3	
Total total	42	

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

LARYNX (Continued)

Females

Duration (months)	Number	Aggregate
4	1	4
5	1	5
10	1	10
18	1	18
36	1	36
Totals	5	73
Average (months)		14.60

LUNGS AND PLEURA

Males

1	1	1
2	2	4
3	8	24
4	5	20
5	4	20
6	11	66
7	2	14
8	1	8
9	1	9
12	9	108
20	1	20
24	2	48
30	1	30
34	1	34
48	1	48
Totals	50	454
Average (months)		9.08

Females

1	1	1
2	1	2
3	2	6
4	2	8
6	7	42
8	3	24
9	1	9
12	4	48
16	1	16
24	1	24
Totals	23	180
Average (months)		7.83

PANCREAS

Males

2	1	2
3	4	12
4	7	28
5	6	30
6	12	72
7	1	7
8	5	40
11	2	22
12	8	96
14	1	14
18	1	18
24	5	120
72	1	72
Totals	54	533
Average (months)		9.87

Females

2	1	2
3	5	15
4	5	20
6	10	60
8	1	8
10	4	40
12	9	108
15	1	15
17	1	17
18	1	18
24	2	48
36	3	108
120	1	120
Totals	44	579
Average (months)		13.16
Unknown	2	
Total total	46	

KIDNEYS

Males

2	1	2
3	5	15
4	3	12
5	1	5
6	6	36
8	3	24
9	2	18
10	1	10
11	1	11
12	4	48
14	2	28
15	1	15
16	1	16
18	1	18
22	1	22
24	2	48

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

KIDNEYS—Males (Continued)

Duration (months)	Number	Aggregate
30	1	30
31	1	31
48	2	96
Totals	39	485
Average (months)		12.44
Unknown	3	
Total total	42	

Females

2	3	6
3	2	6
4	3	12
5	1	5
6	1	6
10	1	10
12	1	12
15	1	15
17	1	17
18	1	18
24	2	48
36	1	36
48	1	48
Totals	19	239
Average (months)		12.58
Unknown	2	
Total total	21	

PROSTATE

Males

3	3	9
4	3	12
5	1	5
6	5	30
7	2	14
8	5	40
9	2	18
12	21	252
14	2	28
15	2	30
18	7	126
19	1	19
20	1	20
21	1	21
24	14	336
26	2	52
28	2	56
36	4	144
60	1	60
72	1	72
120	1	120
Totals	81	1,464
Average (months)		18.07
Unknown	5	
Total total	86	

BLADDER

Males

2	1	2
3	2	6
4	4	16
5	1	5
6	18	108
7	3	21
8	5	40
9	2	18
10	3	30
11	1	11
12	26	312
13	1	13
14	1	14
16	1	16
18	5	90
19	1	19
24	13	312
26	1	26
30	2	60
36	3	108
48	1	48
60	3	180
72	1	72
98	1	98
120	1	120
Totals	101	1,745
Average (months)		17.28
Unknown	3	
Total total	104	

Females

2	1	2
3	1	3
4	1	4
5	1	5
6	8	48
7	1	7
8	1	8
9	3	27
10	1	10
12	10	120

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

BLADDER—Females (Continued)

Duration (months)	Number	Aggregate
15	2	30
18	1	18
24	7	168
30	3	90
36	3	108
42	1	42
48	2	96
84	1	84
Totals	48	870
Average (months)		18.13

BRAIN

	Number	Aggregate
Males		
2	1	2
4	1	4
33	1	33
84	1	84
Totals	4	123
Average (months)		30.75
Unknown	2	
Total total	6	
Females		
5	1	5
6	2	12
8	2	16
12	1	12
18	1	18
24	1	24
Totals	8	87
Average (months)		10.88

BONES

	Number	Aggregate
Males		
1	1	1
3	2	6
4	3	12
5	2	10
6	4	24
8	5	40
9	2	18
10	1	10
12	6	72
14	1	14
21	1	21
24	4	96
36	3	108
60	1	60
Totals	36	492
Average (months)		13.67
Females		
1	1	1
3	3	9
4	1	4
6	6	36
8	2	16
9	3	27
12	1	12
13	1	13
15	2	30
16	2	32
18	4	72
21	1	21
24	2	48
33	1	33
36	5	180
48	1	48
Totals	36	582
Average (months)		16.17
Unknown	2	
Total total	38	

TESTES

	Number	Aggregate
Males		
3	1	3
8	1	8
12	2	24
24	2	48
Totals	6	83
Average (months)		13.83

PENIS

	Number	Aggregate
Males		
5	1	5
7	1	7
12	3	36
24	2	48
Totals	7	96
Average (months)		13.71

HEART

	Number	Aggregate
Males		
6	1	6
9	1	9
Totals	2	15
Average (months)		7.50
Females		
12	1	12

Males and Females

Table 11 (By Known Duration of Disease in Months, According to Organs and Parts) Continued

Duration (months)	Number	Aggregate
GENERAL		
	Males	
3	2	6
6	1	6
7	1	7
8	1	8
12	2	24
24	1	24
48	1	48
Totals	9	123
Average (months)		13.67
	Females	
2	1	2
5	2	10
6	4	24
8	1	8
9	1	9
12	3	36
14	1	14
24	3	72
60	1	60
Totals	17	235
Average (months)		13.82
Unknown	1	
Total total	18	

APPENDIX C

CANCER MORTALITY OF PORTSMOUTH, ENG.—1919-1924

MALES AND FEMALES

Table 1

BY AGE AT TIME OF DEATH

	Total	Aggregate	Males	Aggregate	Females	Aggregate
1	–	–	–	–	–	–
2	–	–	–	–	–	–
3	1	3	1	3	–	–
4	–	–	–	–	–	–
5	–	–	–	–	–	–
6	1	6	1	6	–	–
7	2	14	1	7	1	7
8	–	–	–	–	–	–
9	1	9	1	9	–	–
10	3	30	1	10	2	20
11	–	–	–	–	–	–
12	2	24	1	12	1	12
13	–	–	–	–	–	–
14	–	–	–	–	–	–
15	–	–	–	–	–	–
16	–	–	–	–	–	–
17	1	17	1	17	–	–
18	–	–	–	–	–	–
19	–	–	–	–	–	–
20	2	40	–	–	2	40
21	1	21	1	21	–	–
22	1	22	–	–	1	22
23	1	23	–	–	1	23
24	–	–	–	–	–	–
25	1	25	1	25	–	–
26	1	26	–	–	1	26
27	2	54	1	27	1	27
28	1	28	–	–	1	28
29	1	29	1	29	–	–
30	2	60	–	–	2	60
31	2	62	–	–	2	62
32	2	64	1	32	1	32
33	9	297	2	66	7	231
34	6	204	1	34	5	170
35	7	245	1	35	6	210
36	6	216	1	36	5	180
37	8	296	2	74	6	222
38	16	608	5	190	11	418
39	15	585	3	117	12	468
40	19	760	3	120	16	640
41	14	574	5	205	9	369
42	17	714	7	294	10	420
43	19	817	5	215	14	602
44	10	440	3	132	7	308

Males and Females

Table 1 (By Age at Time of Death) Continued

	Total	Aggregate	Males	Aggregate	Females	Aggregate
45	15	675	4	180	11	495
46	30	1,380	10	460	20	920
47	28	1,316	14	658	14	658
48	22	1,056	7	336	15	720
49	31	1,519	9	441	22	1,078
50	24	1,200	12	600	12	600
51	31	1,581	12	612	19	969
52	38	1,976	22	1,144	16	832
53	43	2,279	15	795	28	1,484
54	54	2,916	22	1,188	32	1,728
55	37	2,035	19	1,045	18	990
56	45	2,520	17	952	28	1,568
57	55	3,135	36	2,052	19	1,083
58	48	2,784	26	1,508	22	1,276
59	68	4,012	34	2,006	34	2,006
60	42	2,520	19	1,140	23	1,380
61	49	2,989	24	1,464	25	1,525
62	58	3,596	30	1,860	28	1,736
63	58	3,654	26	1,638	32	2,016
64	45	2,880	23	1,472	22	1,408
65	57	3,705	31	2,015	26	1,690
66	39	2,574	20	1,320	19	1,254
67	44	2,948	25	1,675	19	1,273
68	55	3,740	23	1,564	32	2,176
69	56	3,864	27	1,863	29	2,001
70	43	3,010	22	1,540	21	1,470
71	44	3,124	22	1,562	22	1,562
72	48	3,456	20	1,440	28	2,016
73	37	2,701	13	949	24	1,752
74	41	3,034	20	1,480	21	1,554
75	29	2,175	13	975	16	1,200
76	37	2,812	12	912	25	1,900
77	29	2,233	16	1,232	13	1,001
78	22	1,716	9	702	13	1,014
79	21	1,659	9	711	12	948
80	18	1,440	9	720	9	720
81	25	2,025	10	810	15	1,215
82	15	1,230	6	492	9	738
83	5	415	2	166	3	249
84	10	840	5	420	5	420
85	8	680	3	255	5	425
86	7	602	4	344	3	258
87	–	–	–	–	–	–
88	5	449	1	88	4	352
89	1	89	–	–	1	89
90	1	90	1	90	–	–
91	–	–	–	–	–	–
92	2	184	–	–	2	184
93	2	186	1	93	1	93
Totals	1,696	103,308	755	46,685	941	56,623
Aggregate age (years)		60.9		61.8		60.2

Males and Females

Table 1 (By Age at Time of Death) Continued

	Total	Per cent.	Males	Per cent.	Females	Per cent.
1– 10	8	0.5	5	0.7	3	0.3
10– 20	5	0.3	2	0.3	3	0.3
20– 30	11	0.6	4	0.5	7	0.7
30– 40	90	5.3	19	2.5	71	7.5
40– 50	210	12.4	76	10.1	134	14.2
50– 60	461	27.2	222	29.4	239	25.4
60– 70	504	29.7	251	33.2	253	26.9
70– 80	326	19.2	143	18.9	183	19.4
80– 90	77	4.5	32	4.2	45	4.8
90–100	4	0.2	1	0.1	3	0.3
Total	1,696	99.9	755	99.9	941	99.8

Table 2

BY ORGANS AND PARTS

	Total	Males	Females		Total	Males	Females
Lips	10	9	1	Ovary	31	–	31
Tongue	75	70	5	Uterus	209	–	209
Mouth	8	6	2	Vagina	8	–	8
Jaw	38	28	10	Others of this class	–	–	–
Throat	10	7	3	Breast	174	–	174
Neck	25	23	2	Skin	4	3	1
Face	17	11	6	Larynx	29	21	8
Eye	4	2	2	Lungs	40	22	18
Nose	1	–	1	Pancreas	21	17	4
Ear	6	2	4	Kidneys	13	7	6
Head	–	–	–	Prostate	21	21	–
Tonsil	14	9	5	Bladder	46	29	17
Cheek	5	4	1	Brain	2	–	2
Hard palate	4	4	–	Bones	31	16	15
Chin	–	–	–	Testes	4	4	–
Pharynx	8	7	1	Penis	5	5	–
Oesophagus	76	65	11	Heart	13	8	5
Stomach	223	126	97	Appendix	1	–	1
Liver and gall	157	67	90	General	16	4	12
Mesentery	10	3	7	Unknown	–	–	–
Intestines	206	77	129				
Rectum	131	78	53	Total	1,696	755	941

SUMMARY

	Total	Per cent.	Males	Per cent.	Females	Per cent.
Cancer of buccal cavity	269	15.9	217	28.7	52	5.5
Cancer of stomach and liver	401	23.6	213	28.2	188	20.0
Cancer of peritoneum, Intestines and rectum	348	20.5	158	20.9	190	20.2
Cancer of female genitals	248	14.6	–	–	248	26.4
Cancer of breast	174	10.3	–	–	174	18.5
Cancer of skin	13	0.8	8	1.1	5	0.5
Cancer of other organs or organs not specified	243	14.3	159	21.1	84	8.9
Totals	1,696	100.0	755	100.0	941	100.0

APPENDIX D

CANCER DEATH RATES IN VARIOUS CITIES

Table 1

ALBANY, N. Y.—1919-1923

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	5	0.9	5	1.9	–	–
Tongue	16	1.8	10	3.7	–	–
Mouth	4	0.7	4	1.5	–	–
Jaw	9	1.6	8	3.0	1	0.3
Throat	9	1.6	7	2.6	2	0.7
Neck	14	2.5	9	3.3	5	1.7
Face	12	2.1	7	2.6	5	1.7
Eyes	2	0.4	1	0.4	1	0.3
Nose	–	–	–	–	–	–
Ear	2	0.4	–	–	2	0.7
Head	–	–	–	–	–	–
Tonsil	4	0.7	2	0.7	2	0.7
Cheek	–	–	–	–	–	–
Hard palate	–	–	–	–	–	–
Chin	–	–	–	–	–	–
Pharynx	5	0.9	2	0.7	3	1.0
Oesophagus	23	4.1	20	7.4	3	1.0
Stomach	162	28.9	95	35.2	67	23.1
Liver and gall bladder	70	12.5	20	7.4	50	17.2
Mesentery and peritoneum	11	2.0	6	2.2	5	1.7
Intestines	103	18.4	40	14.8	63	21.7
Rectum and anus	34	6.1	17	6.3	17	5.9
Ovary	16	2.9	–	–	16	5.5
Uterus	98	17.5	–	–	98	33.8
Vulva and vagina	–	–	–	–	–	–
Others of this class	5	0.9	–	–	5	1.7
Breast	86	15.4	–	–	86	29.7
Skin	2	0.4	–	–	2	0.7
Larynx	12	2.1	11	4.1	1	0.3
Lungs and pleura	14	2.5	9	3.3	5	1.7
Pancreas	13	2.3	8	3.0	5	1.7
Kidneys	13	2.3	7	2.6	6	2.1
Prostate	35	6.3	35	13.0	–	–
Bladder	26	4.6	13	4.8	13	4.5
Brain	2	0.4	–	–	2	0.7
Bones	22	3.9	12	4.4	10	3.4
Testes	–	–	–	–	–	–
Penis	3	0.6	3	1.1	–	–
Heart	–	–	–	–	–	–
Appendix	–	–	–	–	–	–
General	14	2.5	2	0.7	12	4.1
Totals	840	150.2	353	130.7	487	167.6

Table 1—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	99	17.7	75	27.8	24	8.3
Cancer of stomach and liver	232	41.5	115	42.6	117	40.3
Cancer of peritoneum, intestines and rectum	148	26.4	63	23.3	85	29.3
Cancer of female genital organs	119	21.3	–	–	119	41.0
Cancer of breast	86	15.4	–	–	86	29.6
Cancer of skin	2	0.4	–	–	2	0.7
Cancer of other organs or of organs not specified	154	27.5	100	37.0	54	18.6
Totals	840	150.2	353	130.7	487	167.6

BY TREATMENT BY OPERATION

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Yes	300	53.6	115	42.6	185	63.8
No	433	77.3	193	71.5	240	82.8
Known method	733	130.9	308	114.1	425	146.6
Unknown	107		45		62	
Total	840		353		487	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	53	9.5	23	8.5	30	10.3
No	678	121.1	284	105.2	394	135.9
Known method	731	130.6	307	113.7	424	146.2
Unknown	109		46		63	
Total	840		353		487	

BY PLACE OF OCCURRENCE

	Total	Rate	Males	Rate	Females	Rate
Hospital	326	58.2	165	61.1	161	55.5
Institution	10	1.8	1	0.4	9	3.1
Residence	17	3.0	4	1.5	13	4.5
General	487	87.0	183	67.8	304	104.8
Total	840	150.0	353	130.3	487	167.9

BY MARITAL CONDITION

	Females	Rate
Married	218	75.2
Single	86	29.7
Widowed	182	62.8
Divorced	–	–
Known total	486	167.7
Unknown	1	
Total	487	

Table 2

BOSTON, MASS.—1920-1924

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	22	.6	21	1.2	1	.1
Tongue	80	2.2	74	4.1	6	.3
Mouth	7	.2	6	.3	1	.1
Jaw	61	1.6	48	2.6	13	.7
Throat	48	1.3	41	2.2	7	.4
Neck	101	2.8	64	3.6	37	1.9
Face	38	1.0	20	1.0	18	1.0
Eye	10	.3	4	.2	6	.3
Nose	7	.2	4	.2	3	.2
Ear	12	.3	3	.2	9	.5
Head	1	.02	–	–	1	.1
Tonsil	10	.3	7	.4	3	.2
Cheek	6	.2	5	.3	1	.1
Hard palate	7	.2	7	.3	–	–
Chin	–	–	–	–	–	–
Pharynx	8	.2	6	.3	2	.1
Oesophagus	134	5.0	147	8.2	37	1.9
Stomach	1,033	28.1	571	31.7	462	24.8
Liver and gall bladder	454	12.4	191	10.6	263	14.1
Mesentery and peritoneum	49	1.3	20	1.0	29	1.6
Intestines	641	17.5	239	13.3	402	21.6
Rectum and anus	287	7.8	141	7.8	146	7.8
Ovary	96	2.6	–	–	96	5.0
Uterus	572	15.6	–	–	572	30.7
Vulva and vagina	27	.8	–	–	27	1.4
Others of this class	11	.3	–	–	11	.6
Breast	492	13.4	–	–	492	26.4
Skin	25	.7	7	.4	18	1.0
Larynx	63	1.7	54	3.0	9	.4
Lungs and pleura	143	3.9	70	3.8	73	3.9
Pancreas	133	3.6	70	3.9	63	3.4
Kidneys	76	2.1	42	2.3	34	1.9
Prostate	141	3.8	141	7.8	–	–
Bladder	191	5.2	129	7.2	62	3.4
Brain	24	.6	8	.4	16	.9
Bones	126	3.4	61	3.3	65	3.4
Testes	15	.4	15	.8	–	–
Penis	9	.2	9	.4	–	–
Heart	4	.1	1	.1	3	.1
Appendix	2	.1	–	–	2	.1
General	84	2.3	36	2.0	48	2.6
Totals	5,300	144.3	2,262	124.9	3,038	163.0

Table 2—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	602	16.4	457	25.2	145	7.8
Cancer of stomach and liver	1,487	40.5	762	42.1	725	38.9
Cancer of mesentery, intestines and rectum	977	26.6	400	22.1	577	31.0
Cancer of female genital Organs	706	19.2	–	–	706	37.9
Cancer of breast	492	13.4	–	–	492	26.4
Cancer of skin	25	.7	7	.4	18	1.0
Cancer of other organs or of organs not specified	1,011	27.5	636	35.1	375	20.1
Totals	5,300	144.3	2,262	124.9	3,038	163.0

BY TREATMENT BY OPERATION

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Yes	1,913	52.0	825	45.8	1,088	58.3
No	1,181	32.1	494	27.4	687	36.8
Known method	3,094	84.1	1,319	73.2	1,775	95.1
Unknown	2,206		943		1,263	
Totals	5,300		2,262		3,038	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	294	8.0	157	8.7	137	7.3
No	1,837	50.1	721	40.1	1,116	59.8
Known method	2,131	58.1	878	48.8	1,253	67.1
Unknown	3,169		1,384		1,785	
Totals	5,300		2,262		3,038	

BY MARITAL CONDITION

	Females	Rate
Married	1,285	68.9
Single	622	33.4
Widowed	1,088	58.3
Divorced	37	2.0
Known total	3,032	162.6
Unknown	6	
Total total	3,038	

Table 3

BUFFALO, N. Y., 1922

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	–	–	–	–	–	–
Tongue	3	.6	3	1.2	–	–
Mouth	–	–	–	–	–	–
Jaw	5	1.0	5	2.0	–	–
Throat	2	.4	1	.4	1	.4
Neck	2	.4	2	.8	–	–
Face	2	.4	1	.4	1	.4
Eye	–	–	–	–	–	–
Nose	1	.2	1	.4	–	–
Ear	1	.2	1	.4	–	–
Head	–	–	–	–	–	–
Tonsil	1	.2	1	.4	–	–
Cheek	1	.2	1	.4	–	–
Hard palate	2	.4	2	.8	–	–
Chin	–	–	–	–	–	–
Pharynx	–	–	–	–	–	–
Oesophagus	16	3.2	13	5.1	3	1.2
Stomach	92	18.2	49	19.4	43	17.0
Liver and gall bladder	37	7.3	11	4.3	26	10.3
Mesentery and peritoneum	5	1.0	2	.8	3	1.2
Intestines	43	8.5	23	9.1	20	7.9
Rectum and anus	22	4.3	11	4.3	11	4.3
Ovary	7	1.4	–	–	7	2.8
Uterus	52	10.3	–	–	52	20.6
Vulva and vagina	2	.4	–	–	2	.8
Others of this class	–	–	–	–	–	–
Breast	38	7.5	–	–	38	15.0
Skin	–	–	–	–	–	–
Larynx	5	1.0	5	2.0	–	–
Lungs and pleura	10	2.0	6	2.4	4	1.6
Pancreas	11	2.2	8	3.2	3	1.2
Kidneys	1	.2	1	.4	–	–
Prostate	15	3.0	15	5.9	–	–
Bladder	18	3.6	9	3.6	9	3.6
Brain	–	–	–	–	–	–
Bones	2	.4	2	.8	–	–
Testes	1	.2	1	.4	–	–
Penis	–	–	–	–	–	–
Heart	3	.6	2	.8	1	.4
Appendix	–	–	–	–	–	–
General	5	1.0	2	.8	3	1.2
Totals	405	80.3	178	70.5	227	89.9

Table 3—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	36	7.1	31	12.3	5	2.0
Cancer of stomach and liver	129	25.6	60	23.8	69	27.3
Cancer of peritoneum, intestines and rectum	70	13.9	36	14.2	34	13.5
Cancer of female genital organs	61	12.1	–	–	61	24.1
Cancer of breast	38	7.5	–	–	38	15.0
Cancer of skin	–	–	–	–	–	–
Cancer of other organs or of organs not specified	71	14.1	51	20.2	20	8.0
Totals	405	80.3	178	70.5	227	89.9

BY TREATMENT BY OPERATION

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Yes	141	27.9	69	27.3	72	28.5
No	246	48.6	107	42.3	139	54.9
Known method	387	76.5	176	69.6	211	83.4
Unknown	18		2		16	
Totals	405		178		227	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	37	7.3	24	9.5	13	5.1
No	343	67.8	141	57.7	202	79.8
Known method	380	75.1	165	67.2	215	84.9
Unknown	25		13		12	
Totals	405		178		227	

BY PLACE OF OCCURRENCE

	Total	Rate	Males	Rate	Females	Rate
Hospital	154	30.4	90	35.6	64	25.3
Institution	17	3.4	5	2.0	12	4.7
Residence	229	45.3	83	32.8	146	57.7
General	5	1.0	–	–	5	2.0
Totals	405	80.1	178	70.4	227	89.7

BY MARITAL CONDITION

	Females	Rate
Married	114	45.1
Single	27	10.7
Widowed	82	32.4
Divorced	4	1.6
Totals	227	89.8

Table 4

CHICAGO, ILL., 1924

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	7	.3	5	.4	2	.2
Tongue	34	1.3	30	2.2	4	.3
Mouth	4	.2	3	.2	1	.1
Jaw	42	1.6	37	2.7	5	.4
Throat	9	.3	8	.6	1	.1
Neck	32	1.2	21	1.5	11	.8
Face	17	.6	8	.6	9	.7
Eyes	6	.2	2	.1	4	.3
Nose	5	.2	1	.1	4	.3
Ear	6	.2	3	.2	3	.2
Head	1	.0	1	.1	–	–
Tonsils	5	.2	3	.2	2	.2
Cheek	5	.2	4	.3	1	.1
Hard palate	2	.1	2	.1	–	–
Chin	–	–	–	–	–	–
Pharynx	8	.3	6	.4	2	.2
Oesophagus	141	5.2	111	8.8	30	2.3
Stomach	775	28.7	464	33.9	311	23.4
Liver and gall bladder	256	9.5	102	7.5	154	11.6
Mesentery and peritoneum	21	.8	8	.6	13	1.0
Intestines	296	11.0	142	10.4	154	11.6
Rectum and anus	141	5.2	78	5.8	63	4.7
Ovary	47	1.7	–	–	47	3.5
Uterus	346	12.8	–	–	346	26.0
Vulva and vagina	10	.4	–	–	10	.8
Others of this class	–	–	–	–	–	–
Breast	265	9.8	–	–	265	19.9
Skin	14	.5	8	.6	6	.5
Larynx	47	1.7	42	3.1	5	.4
Lungs and pleura	75	2.8	50	3.7	25	1.9
Pancreas	105	3.9	58	4.2	47	3.5
Kidneys	63	2.3	42	3.1	21	1.6
Prostate	86	3.2	86	6.3	–	–
Bladder	157	5.8	104	7.7	53	4.0
Brain	14	.5	6	.4	8	.6
Bones	71	2.6	36	2.6	35	2.6
Testes	6	.2	6	.4	–	–
Penis	7	.3	7	.5	–	–
Heart	4	.2	2	.1	2	.2
Appendix	2	.1	–	–	2	.2
General	31	1.1	9	.7	22	1.7
Totals	3,163	117.2	1,495	110.1	1,668	125.9

Table 4—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	324	12.0	245	17.9	79	5.9
Cancer of stomach and liver	1,031	38.2	566	41.3	465	34.9
Cancer of peritoneum, intestines and rectum	458	17.0	228	16.7	230	17.3
Cancer of female genital organs	403	14.9	–	–	403	30.3
Cancer of breast	265	9.8	–	–	265	19.9
Cancer of skin	14	.5	8	.6	6	.5
Cancer of other organs or of organs not specified	668	24.7	448	32.7	220	16.5
Totals	3,163	117.2	1,495	110.1	1,668	125.9

BY TREATMENT BY OPERATION

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Yes	1,209	44.8	541	39.5	668	50.2
No	1,880	69.6	912	66.6	968	72.7
Known method	3,089	114.4	1,453	106.1	1,636	122.9
Unknown	74		42		32	
Totals	3,163		1,495		1,668	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	1,417	52.5	1,284	93.8	133	10.0
No	1,724	63.8	201	14.7	1,523	114.4
Known method	3,141	116.3	1,485	108.5	1,656	124.4
Unknown	22		10		12	
Totals	3,163		1,495		1,668	

BY PLACE OF OCCURRENCE

	Total	Rate	Males	Rate	Females	Rate
Hospital	1,284	47.5	711	51.9	573	43.1
Institution	23	.9	7	.5	16	1.2
Residence	1,848	68.4	775	56.6	1,073	80.6
General	8	.3	2	.1	6	.5
Totals	3,163	117.1	1,495	109.1	1,668	125.4

BY MARITAL CONDITION

	Females	Rate
Married	859	64.6
Single	160	12.0
Widowed	629	47.3
Divorced	20	1.5
Totals	1,668	125.4

Table 5

NEW ORLEANS, LA.—1919-1923

(White)

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	4	0.3	4	0.5	–	–
Tongue	52	3.5	47	6.4	5	0.7
Mouth	9	0.6	9	1.2	–	–
Jaw	22	1.5	18	2.4	4	0.5
Throat	21	1.4	21	2.8	–	–
Neck	43	2.9	34	4.6	9	1.2
Face	60	4.0	39	5.3	21	2.8
Eyes	8	0.5	4	0.5	4	0.5
Nose	7	0.5	5	0.7	2	0.3
Ear	4	0.3	3	0.4	1	0.1
Head	4	0.3	1	0.1	3	0.4
Tonsil	1	0.1	1	0.1	–	–
Cheek	4	0.3	4	0.5	–	–
Hard palate	–	–	–	–	–	–
Chin	–	–	–	–	–	–
Pharynx	8	0.5	8	1.2	–	–
Oesophagus	35	2.3	31	4.2	4	0.5
Stomach	343	23.0	202	27.3	141	18 8
Liver and gall bladder	154	10.3	69	9.3	85	11.3
Mesentery and peritoneum	21	1.4	7	0.9	14	1.9
Intestines	100	6.7	40	5.4	60	8.0
Rectum and anus	44	2.9	15	2.0	29	3 9
Ovary	18	1.2	–	–	18	2.4
Uterus	240	16.1	–	–	240	32.0
Vulva and vagina	7	0.5	–	–	7	0.9
Others of this class	4	0.3	–	–	4	0.5
Breast	142	9.5	1	0.1	141	18.8
Skin	10	0.7	7	0.9	3	0.4
Larynx	42	2.8	38	5.1	4	0.5
Lungs and pleura	41	2.8	28	3.8	13	1.7
Pancreas	12	0.8	8	1.2	4	0.5
Kidneys	19	1.3	10	1.4	9	1.2
Prostate	45	3.0	45	6.1	–	–
Bladder	64	4.3	48	6.5	,16	2.1
Brain	17	1.1	7	0.9	10	1.3
Bones	36	2.4	14	1.9	22	2.9
Testes	1	0.1	1	0.1	–	–
Penis	4	0.3	4	0.5	–	–
Heart	2	0.1	1	0.1	1	0.1
Appendix	–	–	–	–	–	–
General	33	2.2	12	1.6	21	2.8
Totals	1,681	112.8	786	106.0	895	119.0

Table 5—Continued

BY ORGANS AND PARTS—SUMMARY

(White)

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	282	18.9	229	30.9	53	7.1
Cancer of stomach and liver	497	33.4	271	36.6	226	30.1
Cancer of peritoneum, intestines and rectum	165	11.1	62	8.4	103	13.7
Cancer of female genital organs	269	18.1	–	–	269	35.7
Cancer of breast	142	9.5	1	0.1	141	18.8
Cancer of the skin	10	0.7	7	0.9	3	0.4
Cancer of other organs or of organs not specified	316	21.2	216	29.2	100	13.3
Totals	1,681	112.8	786	106.0	895	119.0

(White)

BY TREATMENT BY OPERATION

	Total	Rate	Males	Rate	Females	Rate
Yes	398	26.7	180	24.3	218	29.1
No	501	33.6	221	29.9	280	37.3
Known method	899	60.3	401	54.2	498	66.4
Unknown	782		385		397	
Totals	1,681		786		895	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	24	1.6	16	2.2	8	1.1
No	795	53.4	348	47.0	447	59.6
Known method	819	55.0	364	49.2	455	60.7
Unknown	862		422		440	
Totals	1,681		786		895	

BY PLACE OF OCCURRENCE

	Total	Rate	Males	Rate	Females	Rate
Hospital	558	37.5	356	48.1	202	26.9
Institution	24	1.6	9	1.2	15	2.0
Residence	1,022	68.6	391	52.8	631	84.1
General	77	5.2	30	4.1	47	6.3
Totals	1,681	112.9	786	106.2	895	119.3

BY MARITAL CONDITION

	Females	Rate
Married	394	52.5
Single	151	20.1
Widowed	328	43.7
Divorced	14	1.9
Known total	887	118.2
Unknown	8	
Totals	895	

Table 6

(Colored)

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	2	.4	2	.8	–	–
Tongue	5	1.0	3	1.2	2	.7
Mouth	2	.4	1	.4	1	.4
Jaw	12	2.3	7	2.9	5	1.8
Throat	1	.2	1	.4	–	–
Neck	2	.4	1	.4	1	.4
Face	8	1.5	5	2.0	3	1.1
Eyes	1	.2	1	.4	–	–
Nose	–	–	–	–	–	–
Ear	2	.4	2	.8	–	–
Head	1	.2	1	.4	–	–
Tonsils	1	.2	1	.4	–	–
Cheek	–	–	–	–	–	–
Hard palate	–	–	–	–	–	–
Chin	–	–	–	–	–	–
Pharynx	–	–	–	–	–	–
Oesophagus	1	.2	1	.4	–	–
Stomach	124	23.6	71	29.0	53	18.9
Liver and gall bladder	47	9.0	31	12.7	16	5.7
Mesentery and peritoneum	6	1.1	3	1.2	3	1.1
Intestines	28	5.3	13	5.3	15	5.4
Rectum and anus	33	6.3	10	4.1	23	8.2
Ovary	8	1.5	–	–	8	2.9
Uterus	148	28.2	–	–	148	52.9
Vulva and vagina	3	.6	–	–	3	1.1
Others of this class	1	.2	–	–	1	.4
Breast	47	9.0	–	–	47	16.8
Skin	3	.6	3	1.2	–	–
Larynx	2	.4	2	.8	–	–
Lungs and pleura	3	.6	1	.4	2	.7
Pancreas	2	.4	1	.4	1	.4
Kidneys	1	.2	1	.4	–	–
Prostate	4	.8	4	1.6	–	–
Bladder	12	2.3	8	3.3	4	1.4
Brain	4	.8	2	.8	2	.7
Bones	18	3.4	8	3.3	10	3.6
Testes	4	.8	4	1.6	–	–
Penis	3	.6	3	1.2	–	–
Heart	–	–	–	–	–	–
Appendix	–	–	–	–	–	–
General	10	1.9	5	2.0	5	1.8
Totals	549	105.0	196	79.8	353	126.4

Table 6—Continued

BY ORGANS AND PARTS—SUMMARY

(Colored)

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	38	7.3	26	10.6	12	4.3
Cancer of stomach and liver	171	32.7	102	41.6	69	24.7
Cancer of peritoneum, intestines and rectum	67	12.8	26	10.6	41	14.7
Cancer of female genital organs	160	30.6	–	–	160	57.3
Cancer of breast	47	9.0	–	–	47	16.8
Cancer of skin	3	.6	3	1.2	–	–
Cancer of other organs or of organs not specified	63	12.0	39	15.9	24	8.6
Totals	549	105.0	196	79.8	353	126.4

(Colored)

BY TREATMENT BY OPERATION

	Total	Rate	Males	Rate	Females	Rate
Yes	36	6.9	10	4.1	26	9.3
No	178	33.9	43	17.6	135	48.2
Known method	214	40.8	53	21.7	161	57.5
Unknown	335		143		192	
Totals	549		196		353	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	2	.4	1	.4	1	.4
No	201	38.3	50	20.4	151	53.9
Known method	203	38.7	51	20.8	152	54.3
Unknown	346		145		201	
Totals	549		196		353	

BY PLACE OF OCCURRENCE.

	Total	Rate	Males	Rate	Females	Rate
Hospital	223	42.5	110	44.9	113	40.4
Institution	5	1.0	1	.4	4	1.4
Residence	295	56.2	73	29.8	222	79.3
General	26	5.0	12	4.9	14	5.0
Totals	549	104.7	196	80.0	353	126.1

BY MARITAL CONDITION

	Females	Rate
Married	58	20.7
Single	65	23.2
Widowed	72	25.7
Divorced	80	28.6
Known total	275	98.2
Unknown	78	
Total	353	

Table 7

SAN FRANCISCO, CALIF.—1920-1924

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	19	.7	16	1.1	3	.2
Tongue	78	2.9	72	5.1	6	.5
Mouth	8	.3	5	.4	3	.2
Jaw	43	1.6	41	2.9	2	.2
Throat	24	.9	22	1.5	2	.2
Neck	73	2.7	63	4.4	10	.8
Face	23	.9	13	.9	10	.8
Eyes	10	.4	7	.5	3	.2
Nose	12	.5	9	.6	3	.2
Ear	16	.6	9	.6	7	.6
Head	4	.2	2	.1	2	.2
Tonsils	12	.5	8	.6	4	.3
Cheek	4	.2	2	.1	2	.2
Hard palate	2	.1	2	.1	–	–
Chin	1	.0	1	.1	–	–
Pharynx	18	.7	16	1.1	2	.2
Oesophagus	120	4.5	109	7.7	11	.9
Stomach	910	34.3	641	45.1	269	21.8
Liver and gall bladder	342	12.9	192	13.5	150	12.1
Mesentery and peritoneum	42	1.6	18	1.3	24	1.9
Intestines	382	14.4	176	12.4	206	16.7
Rectum and anus	215	8.1	136	9.6	79	6.4
Ovary	45	1.7	–	–	45	3.6
Uterus	416	15.7	–	–	416	33.7
Vulva and vagina	7	.3	–	–	7	.6
Others of this class	4	.2	–	–	4	.3
Breast	328	12.4	3	.2	325	26.3
Skin	22	.8	16	1.1	6	.5
Larynx	66	2.5	61	4.3	5	.4
Lungs and pleura	125	4.7	70	4.9	55	4.5
Pancreas	106	4.0	65	4.6	41	3.3
Kidneys	38	1.4	25	1.8	13	1.1
Prostate	129	4.9	129	9.1	–	–
Bladder	93	3.5	65	4.6	28	2.3
Brain	26	1.0	12	.8	14	1.1
Bones	95	3.6	55	3.9	40	3.2
Testes	10	.4	10	.7	–	–
Penis	7	.3	7	.5	–	–
Heart	9	.3	5	.4	4	.3
Appendix	3	.1	1	.1	2	.2
General	67	2.5	29	2.0	38	3.1
Totals	3,954	149.3	2,113	148.7	1,841	149.1

Table 7—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	467	17.6	397	28.0	70	5.7
Cancer of stomach and liver	1,252	47.3	833	58.7	419	33.9
Cancer of peritoneum, intestines and rectum	639	24.1	330	23.2	309	25.0
Cancer of female genital organs	472	17.8	–	–	472	38.2
Cancer of breast	328	12.4	3	.2	325	26.3
Cancer of skin	22	.8	16	1.1	6	.5
Cancer of other organs or of organs not specified	774	29.2	534	37.6	240	19.4
Totals	3,954	149.3	2,113	148.7	1,841	149.1

BY TREATMENT BY OPERATION

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Yes	1,534	57.8	802	56.5	732	59.3
No	1,265	70.2	1,015	71.5	850	68.8
Known method	3,399	128.0	1,817	128.0	1,582	128.1
Unknown	555		296		259	
Totals	3,954		2,113		1,841	

BY AUTOPSY DISPOSITION

	Total	Rate	Males	Rate	Females	Rate
Yes	526	19.8	363	25.6	163	13.2
No	2,818	106.1	1,425	100.4	1,393	112.8
Known method	3,344	125.9	1,788	126.0	1,556	126.0
Unknown	610		325		285	
Totals	3,954		2,113		1,841	

BY PLACE OF OCCURRENCE

	Total	Rate	Males	Rate	Females	Rate
Hospital	2,027	76.4	1,251	88.1	776	62.8
Institution	379	14.3	234	16.5	145	11.7
Residence	1,541	58.0	623	43.9	918	74.3
General	7	.3	5	.4	2	.2
Totals	3,954	149.0	2,113	148.9	1,841	149.0

BY MARITAL CONDITION

	Females	Rate
Married	870	70.4
Single	229	18.6
Widowed	691	55.9
Divorced	48	3.9
Known total	1,838	148.8
Unknown	3	
Total	1,841	

Table 8

PORTSMOUTH, ENG.—1919-1924

BY ORGANS AND PARTS

Rates per 100,000 of Population

Parts	Total	Rate	Males	Rate	Females	Rate
Lips	10	0.7	9	1.2	1	0.1
Tongue	75	5.1	70	9.6	5	0.7
Mouth	8	0.5	6	0.8	2	0.3
Jaw	38	2.6	28	3.9	10	1.3
Throat	10	0.7	7	1.0	3	0.4
Neck	25	1.7	23	3.2	2	0.3
Face	17	1.1	11	1.5	6	0.8
Eye	4	0.3	2	0.3	2	0.3
Nose	1	0.1	–	–	1	0.1
Ear	6	0.4	2	0.3	4	0.5
Head	–	–	–	–	–	–
Tonsil	14	0.9	9	1.2	5	0.7
Cheek	5	0.3	4	0.6	1	0.1
Hard palate	4	0.3	4	0.6	–	–
Chin	–	–	–	–	–	–
Pharynx	8	0.5	7	1.0	1	0.1
Oesophagus	76	5.3	65	9.0	11	1.5
Stomach	223	15.0	126	17.4	97	12.8
Liver and gall bladder	157	10.6	67	9.2	90	11.9
Mesentery and peritoneum	10	0.7	3	0.4	7	0.9
Intestines	206	13.9	77	10.6	129	17.0
Rectum and anus	131	8.8	78	10.7	53	7.0
Ovary	31	2.1	–	–	31	4.1
Uterus	209	14.1	–	–	209	27.6
Vulva and vagina	8	0.5	–	–	8	1.1
Others of this class	–	–	–	–	–	–
Breast	174	11.7	–	–	174	23.0
Skin	4	0.3	3	0.4	1	0.1
Larynx	29	2.0	21	2.9	8	1.1
Lungs	40	2.7	22	3.0	18	2.4
Pancreas	21	1.4	17	2.3	4	0.5
Kidneys	13	0.9	7	1.0	6	0.8
Prostate	21	1.4	21	2.9	–	–
Bladder	46	3.1	29	4.0	17	2.2
Brain	2	0.1	–	–	2	0.3
Bones	31	2.1	16	2.2	15	2.0
Testes	4	0.3	4	0.6	–	–
Penis	5	0.3	5	0.7	–	–
Heart	13	0.9	8	1.1	5	0.7
Appendix	1	0.1	–	–	1	0.1
General	16	1.1	4	0.6	12	1.6
Totals	1,696	114.4	755	104.0	941	124.3

Table 8—Continued

BY ORGANS AND PARTS—SUMMARY

Rates per 100,000 of Population

	Total	Rate	Males	Rate	Females	Rate
Cancer of buccal cavity	269	18.1	217	29.9	52	6.9
Cancer of stomach and liver	401	27.0	213	29.3	188	24.8
Cancer of peritoneum, intestines and rectum	348	23.5	158	21.8	190	25.1
Cancer of female genital organs	248	16.7	–	–	248	32.8
Cancer of breast	174	11.7	–	–	174	23.0
Cancer of skin	13	.9	8	1.1	5	.7
Cancer of other organs or of organs not specified	243	16.4	159	21.8	84	11.1
Totals	1,696	114.4	755	104.0	941	124.3

APPENDIX E

CANCER MORTALITY OF SAN FRANCISCO—1920-1924

BY STREETS AND HOUSES

Alabama Street

822	Stomach	1
829	Ear	1
1039	Pancreas	1
1045	Intestines	1
1063	Stomach	1
1338	Pancreas	1
1404	Stomach	1
1615	Uterus	1
		8

Albion Avenue

125a	Intestines	1

Alma Street

37	Intestine	1
175	Mesentery	1
		2

Allison Street

115	General	1

Alpine Terrace

157	Ovary	1

Alta Street

114	Stomach	1

Alton Street

125	Stomach	1

Alvarado Street

52	Neck	1
554	Uterus	1
839	Pancreas	1
855	Oesophagus	1
919	Intestines	1
		5

Anderson Street

233	Intestines	1
247	Breast	1
737	Uterus	1
		3

Andover Street

193	Stomach	1
479	Stomach	1
517	Stomach	1
549	Skin	1
723	Lungs	1
		5

Angelica Street

74	Mouth	1

Anza Street

7	Stomach	1
25	Uterus	1
433	Stomach	1
715	Stomach	1
1432	Stomach	1
2267	Kidney	1
2326	Ear	1
		7

Arleta Street

338	Prostate	1

Arlington Street

105	Bladder	1
261½	Intestine	1
		2

Army Street

2987	Prostate	1
3025	Kidney	1
3306	Oesophagus	1
3380	Neck	1
3524	Stomach	1
3733	Stomach	1
3863	Breast	1
3914	Stomach	1
3927	Breast	1
4019	Intestines	1
4079	Stomach	1
		11

Arguello Blvd.

745	Skin	1
753	Uterus	1
		2

Ashbury Street

213	Gall bladder	1
214	Breast	1
444	Stomach	1
508	Stomach	1
557	Stomach	1
624	Larynx	1
626	Breast	1
656	Liver	1
657	Stomach	1
737	Breast	1
742	Face	1
980	Uterus	1
		12

Ashton Avenue

320	Oesophagus	1

Athens Street

253	Lungs	1
286	Breast	1
		2

Augusta Street

300	Larynx	1

August Alley

33	Bladder	1

Austen Avenue

317½	Ovary	1

Avalon Avenue

524	Kidney	1

Azter Street

31	Uterus	1

Baker Street

19	Breast	1
40	Intestines	1
122	Stomach	1
300	Face	1
372	Intestines	1
514	Uterus	1
550	Intestines	1
555	Breast	1
603	Bone	1
851	Uterus	1
1538	Rectum	1
1836	Breast	1
2031	General	1
2270	Rectum	1
2737	Uterus	1
2830	Stomach	1
		16

Bancroft Avenue

2053	Intestines	1

By Streets and Houses—Continued

Balboa Street

14	Uterus	1
26	Rectum	1
325	Rectum	1
743	Face	1
1125	Stomach	1
4200	Liver	1
		6

Banks Street

99	Stomach	1
107	Liver	1
597	Uterus	1
		3

Bannam Place

13	Tonsil	1

Bartlett Street

42	Uterus	1
134	Ear	1
411	Uterus	1
412	Intestines	1
504	Stomach	1
		5

Bay Street

430	Lip	1
447	Stomach	1
698	Pancreas	1
718	Stomach	1
		4

Beaver Steret

49	Stomach	1

Belcher Street

59	Oesophagus	1

Belvedere Street

14	Intestines	1
120	Lungs	1
170	Hard palate	1
456	Stomach	1
497	Stomach	1
		5

Bellevue Avenue

487	Prostate	1

Bennington Street

224	Neck	1
224	Lip	1
		2

Bernal Avenue

57	Uterus	1

Bernard Street

140	Uterus	1
146	Bones	1
		2

Bessie Street

58	General	1

Bishop Street

79	Uterus	1

Blake Street

46	Uterus	1

Bocana Street

150	Bladder	1
173	Oesophagus	1
307	Tonsil	1
		3

Bon View Street

20	Throat	1
254	Breast	1
		2

Bosworth Street

419	Stomach	1
742	Breast	1
		2

Bowdoin Street

110	Stomach	1

Boyce Street

69a	Stomach	1

Brady Street

73½	Stomach	1

Brannan Street

900	Stomach	1

Brazil Avenue

339	Lungs	1

Broadway Street

357a	Oesophagus	1
369	Liver	1
381	Liver	1
402	Stomach	1
402	General	1
452	Stomach	1
534	Stomach	1
765	Stomach	1
785	Stomach	1
801	Bone	1
872	Bones	1
1055	Pancreas	1
1136	Rectum	1
1256	Intestines	1
1325	Liver	1
1351	Breast	1
1374	Neck	1
1686	Bladder	1
1701	Breast	1
2295	Bladder	1
		20

Broderick Street

121	Oesophagus	1
400	Stomach	1
509	Uterus	1
550	Breast	1
632	Breast	1
821	Bladder	1
901	Rectum	1
1046	Bone	1
1630	Uterus	1
2115	Uterus	1
2298	Lung	1
2860	Rectum	1
2869	Pancreas	1
		13

Brunswick Street

40	Stomach	1
605	Oesophagus	1
		2

Bryant Street

2209	Pancreas	1
2347	Liver	1
2560	Prostate	1
2688	Breast	1
2689	Breast	1
2783	Stomach	1
2816	Face	1
2864	Bladder	1
		8

Buena Vista Avenue

601	Liver	1
615	Breast	1
		2

Buchanan Street

401	Intestines	1
626	Uterus	1
801	Ovary	1
1008½	Uterus	1
1203	Stomach	1
1527	Larynx	1
1860	Stomach	1

By Streets and Houses—Continued

Buchanan Street—Continued

1900	Breast	1
2959	Liver	1
3028	Ovary	1
3210	Liver	1
3214	Liver	1
		12

Bush Street

524	Bladder	1
555	Lip	1
645	Uterus	1
650	Uterus	1
650	Cheek	1
660	Intestines	1
698	Uterus	1
734	Breast	1
800	General	1
*900	Kidneys	1
972	Breast	1
1019	Liver	1
1035	Breast	1
1065	Intestines	1
1105	Tongue	1
1112c	Intestines	1
1209	Liver	1
1209	Rectum	1
1240	General	1
1661	General	1
1677	Intestines	1
1700	Stomach	1
1712	Uterus	1
1818	Prostate	1
1878	Breast	1
1956	Bone	1
1988	Prostate	1
2035	Liver	1
2107	Intestines	1
2188	Liver	1
2325	Stomach	1
2365	Liver	1
2508	Stomach	1
2530	Stomach	1
2658	Uterus	1
2691	Rectum	1
2719	Stomach	1
2736	Liver	1
2813½	Oesophagus	1
2900	Stomach	1
		40

*St. Francis Hospital

Cabrillo Street

130	Bladder	1
430	Liver	1
		2

California Street

570	Stomach	1
612	Stomach	1
790	Breast	1
875	Intestines	1
897	Kidney	1
*901	Stomach	1
901	Intestines	1
901	Uterus	1
901	Ovaries	1
911	Stomach	1
1155	Bladder	1
1299	Breast	1
1370	Intestines	1
1390	Stomach	1
1408	Breast	1
1454	Intestines	1
1478a	General	1
1507	Breast	1
1531	Uterus	1
2000	Stomach	1
2009	Cervix	1
2025	Gall bladder	1
2105	Rectum	1
2115	Intestines	1
2174	Throat	1
2186	Breast	1
2201	Breast	1
2315	Stomach	1
2332	Bone	1
2399	Ovaries	1
2402	Uterus	1
2460	Stomach	1
2503½	Rectum	1
2532	Pancreas	1
2578	Stomach	1
2615	Prostate	1
2659	Stomach	1
2659	Uterus	1
2659	Intestines	1
2808	Breast	1
2834	Bone	1
2852	Breast	1
2860	General	1
2861	Liver	1
2909	Brain	1
3078	Uterus	1
3332	Stomach	1
3626	Uterus	1
3882	Intestines	1
3914	Liver	1
3917	Lungs	1
3932	Stomach	1
4006	Stomach	1
4553	Liver	1
4860	Rectum	1

*University Club

4933	Throat	1
5039	Stomach	1
5736	Bone	1
5850	Neck	1
6411	Rectum	1
		60

California and Maple Sts.—(Children's Hospital)

	Neck	1

Camp Street

31b	Breast	1

Canning Court

4	Bone	1

Capp Street

65	Ovary	1
161	Stomach	1
359	Breast	1
361	Stomach	1
398	Face	1
437	Stomach	1
503	Intestine	1
517½	Oesophagus	1
518	Liver	1
644	Uterus	1
672a	Liver	1
720	Stomach	1
721	Lung	1
727	Liver	1
729	Uterus	1
737	Uterus	1
761	Uterus	1
854	Lungs	1
865	General	1
1005	Tongue	1
1055	Neck	1
1106	Stomach	1
		22

Card Alley

4	Bones	1
7	Lung	1
		2

Carl Street

136	Breast	1
498	Intestines	1
14	Stomach	1
		3

Carolina Street

955	Rectum	1
1129	Peritoneum	1
		2

By Streets and Houses—Continued

Carmelita Street

54	Stomach	1

Charter Oak Street

216	Stomach	1
610	Tonsil	1
		2

Caselli Avenue

318	Oesophagus	1
421	Stomach	1
434	Intestines	1
		3

Castro Street

72	Neck	1
94	Intestines	1
412	Stomach	1
744	Neck	1
785	Lip	1
855	Breast	1
1003	Lip	1
1015	Uterus	1
		8

Central Avenue

7	Pancreas	1
66	Throat	1
72	Intestines	1
144	Stomach	1
146	Breast	1
828	Bone	1
934	Prostate	1
		7

Chattanooga Street

113	Breast	1
159	Uterus	1
167	Stomach	1
173	Stomach	1
195	Breast	1
		5

Chenery Street

62	Uterus	1
165	Oesophagus	1
214	Oesophagus	1
558	Intestines	1
662	Rectum	1
733	Intestines	1
422	Intestines	1
		7

Chesley Street

45	Stomach	1

Chestnut Street

436	Intestine	1
1331a	Uterus	1
		2

Clara Street

21b	Breast	1
58	Breast	1
261	Liver	1
		3

Clayton Street

134	Peritoneum	1
182	Uterus	1
200	Throat	1
513	Stomach	1
657	Uterus	1
710	Peritoneum	1
765	Uterus	1
838	Lungs–pleura	1
850	Uterus	1
925	Kidney	1
1108	Uterus	1
		11

Clement Street

134	Liver	1
288	Bladder	1
610	Breast	1
734	Pancreas	1
1136	Intestines	1
1916	Uterus	1
		6

Clementina Street

375a	Uterus	1
379a	Prostate	1
		2

Clay Street

50	Stomach	1
66	Stomach	1
632	Brain	1
640	Stomach	1
640	Lung	1
667	Rectum	1
668	Penis	1
733	Throat	1
747	Tongue	1
761	Liver	1
777	Liver	1
808	Oesophagus	1
846	Pancreas	1
847	Throat	1
920	Rectum	1
1087	Liver	1
1089	Stomach	1
1104	Lung	1
1121	Face	1
1175	Liver	1
1218	Stomach	1
1270	Breast	1
1420	Stomach	1
1458	Breast	1
1475	Bladder	1
1539	Stomach	1
1539	Stomach	1
1560	Stomach	1
1631	Prostate	1
1644	Stomach	1
1650	Intestines	1
1909	Stomach	1
2220	Stomach	1
2544	Breast	1
2569	Bladder	1
2655	Pancreas	1
2655	Liver	1
2667	Liver	1
2751	Stomach	1
2835	Stomach	1
3043	Uterus	1
3110	Pancreas	1
3150	Bone	1
3294	Intestines	1
3301	Rectum	1
3314	Breast	1
3335	Liver	1
3595	Intestines	1
3600	Rectum	1
3779	Bones	1
3800	Lung	1
3954	Liver	1
3975	Liver	1
		53

Church Street

115	Uterus	1
264	Stomach	1
359	Bladder	1
502	Stomach	1
550	Stomach	1
664	Stomach	1
748	Liver	1
1061	Stomach	1
1317	Chin	1
1453	Uterus	1
1607	Throat	1
1671	Liver	1
1835	Larynx	1
		13

By Streets and Houses—Continued

Clipper Street

275	Stomach	1
321	Lung	1
383	Gall bladder	1
511	Liver and g. b.	1
		4

Clover Street

35	Larynx	1

Cole Street

400	Stomach	1
612	Intestine	1
650	Eye	1
710	Tongue	1
830	Intestines	1
1012	Stomach	1
1051	Gall bladder	1
1054	Uterus	1
1154	Bone	1
1318	Breast	1
		10

Coleridge Street

72	Stomach	1
85	Uterus	1
		2

Collins Street

50	Uterus	1

Collingwood Street

33	Breast	1
75a	Uterus	1
258	Stomach	1
280	Breast	1
442	Stomach	1
		5

Columbus Avenue

36	Tongue	1
217	Liver	1
248	Bladder	1
444	Pancreas	1
955	Uterus	1
1229	Stomach	1
		6

Cook Street

58	Uterus	1

Clinton Park

144a	Uterus	1
271	Liver	1
		2

College Avenue

10	Breast	1

College Terrace

16	Intestines	1

Commonwealth Avenue

12	Uterus	1
126	Uterus	1
		2

Conkling Street

44	Uterus	1

Congo Street

114	Stomach	1

Corbett Avenue

165	Stomach	1
729	Intestines	1
839	Oesophagus	1
		3

Cortez Avenue

101	Peritoneum	1

Cortland Avenue

120	Stomach	1
210	Stomach	1
430	Breast	1
1225	Stomach	1
		4

Crocker Avenue

138	Breast	1

Crown Terrace

58	Nose	1

Curtis Street

19	Uterus	1

Cushman Street

134	Breast	1

Cumberland Street

67	Liver	1
252	Stomach	1
		2

Danvers Street

222	Uterus	1

Dearbon Street

22	Intestines	1

De Haro Street

1051	Lung	1
1102	Stomach	1
1325	Stomach	1
		3

Delmar Street

29	Stomach	1

Diamond Street

69	Tongue	1
127	Intestines	1
128	Oesophagus	1
130	Bladder	1
236	Stomach	1
915	Uterus	1
1120	Kidneys	1
2708	Gall bladder	1
		8

Divisadero Street

70	Stomach	1
70	Uterus	1
224	Oesophagus	1
446	Ear	1
800	Stomach	1
820	Stomach	1
841	Rectum	1
929	Stomach	1
1050	Breast	1
1123	Gall bladder	1
1229	Uterus	1
1244	Stomach	1
1544	Rectum	1
1621	Uterus	1
1707	Breast	1
1907	Stomach	1
2224	Prostate	1
2226	Bones	1
2308	Stomach	1
2320	Kidney	1
2344	General	1
2345	Uterus	1
2563	Liver	1
2737	Larynx	1
2740	Tongue	1
3125	Uterus	1
		26

Dodge Street

10	Bone	1

Dolores Street

161	Tongue	1
180	Stomach	1
214	Uterus	1
268	Intestines	1

By Streets and Houses—Continued

Dolores Street—Continued

281	Pancreas	1
394	Stomach	1
475	Liver	1
675	Ovary	1
695	Stomach	1
742	Stomach	1
806	Prostate	1
890	Pharynx	1
937	Stomach	1
1062	Intestines	1
1076	Uterus	1
1198	Breast	1
1316	Liver	1
1317	Stomach	1
1322	Uterus	1
1427	Prostate	1
1516	Kidney	1
1563	Stomach	1
1603	Oesophagus	1
1662	Intestine	1
		24

Donner Avenue

1890	Stomach	1

Douglas Street

217	Stomach	1
228	Stomach	1
709	Liver	1
735	Jaw	1
		4

Downey Street

131	Stomach	1
151	Larynx	1
215	Stomach	1
		3

Duboce Street

134	Stomach	1
263	Stomach	1
422	Stomach	1
450	Breast	1
573	Stomach	1
726	Stomach	1
		6

Duncan Street

27½	Pancreas	1
166	Stomach	1
		2

Eddy Street

335	Stomach	1
387	Uterus	1
387	Stomach	1
540	Intestines	1
555	Intestines	1
640	Breast	1
814	Liver	1
815	Uterus	1
878	Intestines	1
907	Tonsil	1
951	Uterus	1
1257	Stomach	1
1658	Liver	1
1749	Intestines	1
		14

Edgewood Avenue

183	Liver	1

Edith Place

56	Skin	1

Eastwood Drive

149	Liver	1

Edinburgh Street

573	Jaw	1
698	Gall bladder	1
914	Breast	1
		3

Egbert Avenue

1251	Breast	1

Eighteenth Avenue

218	Peritoneum	1
248	Kidneys	1
235	Bladder	1
433	Nose	1
560	Breast	1
615	Larynx	1
1241	Liver	1
1863	General	1
		8

Eighteenth Street

1144	Brain (10 yr.)	1
1532	Stomach	1
3272	Kidney	1
3510	Liver	1
3667	Prostate	1
3802	Breast	1
3960a	Stomach	1
4017	Rectum	1
4039	Intestines	1
4042	Breast	1
4145	Eye	1
4255	Uterus	1
4256	Liver	1
4404	Stomach	1
4557	Rectum	1
4558	Rectum	1
		16

Eighth Avenue

142	Breast	1
159	Breast	1
185	Liver	1
260	Uterus	1
292	Intestines	1
456	Stomach	1
658	Bladder	1
755	Intestines	1
1266	Bone	1
1284	Liver	1
1326	Uterus	1
1370	Stomach	1
1463	Bladder	1
		13

Eight Avenue & Geary St.

	Neck	1

Eighth Street

501	Pancreas	1
505	Larynx	1
		2

Eleventh Street

165	Oesophagus	1

Elgin Park

24	Stomach	1
64	Lung	1
		2

Elizabeth Street

11½	Uterus	1
748	Uterus	1
760	Gall bladder	1
		3

Elsie Street

193	Peritoneum	1
243	Testes	1
		2

Ellert Street

33	Breast	1

Ellington Avenue

202	Stomach	1

By Streets and Houses—Continued

Ellis Street

68	Intestines	1
409	Stomach	1
433	Lung	1
480	Stomach	1
516	Intestines	1
710	Breast	1
928	Stomach	1
948	Tongue	1
1347	Stomach	1
1347	Stomach	1
1388	Larynx	1
1428	Gall bladder	1
1492	Rectum	1
1717	Stomach	1
1741	Breast	1
1849	Stomach	1
1885	Stomach	1
1908	Stomach	1
1968	Stomach	1
		19

Elisworth Street

103	Stomach	1

Embarcadero

132	Mouth	1
146	Stomach	1
259	Pancreas	1
259	Liver	1
		4

Endicott Park

30	Stomach	1
42	Pancreas	1
48	Intestines	1
		3

Enterprise Street

11	Breast	1

Euclid Street

124	Lung	1
324	Bones	1
		2

Eugenia Avenue

24	Stomach	1
412	Intestine	1
		2

Eureka Street

155	Stomach	1
227	Stomach	1
272	Stomach	1
		3

Excelsior Avenue

639	Liver	1
641	Gall blalder	1
		2

Fair Avenue

39	Face	1
42	Intestines	1
49	Liver	1
		3

Fairfax Avenue

1150	Pancreas	1
1241	Pancreas	1
		2

Fair Oaks Street

92	Stomach	1
189	Stomach	1
301	Intestines	1
322	Larynx	1
443	Stomach	1
		5

Farallones Street

230	Tongue	1

Farren Street

37	Vulva-vagina	1
42½	Bladder	1
		2

Fell Street

446	Uterus	1
470	Stomach	1
547	Stomach	1
550	Lungs and pleura	1
615	Intestines	1
647	Intestines	1
822	Stomach	1
829	Breast	1
870	Intestines	1
949	Oesophagus	1
1035	Oesophagus	1
1146	Stomach	1
1146	Stomach	1
1272	Stomach	1
1358	Stomach	1
1646	Liver	1
1732	Intestines	1
2058	Intestines	1
2059	Intestines	1
2088	Intestines	1
2090	Testes	1
		21

Fifteenth Street

1918	General	1
1927	Uterus	1
1959	Stomach	1
1959	Stomach	1
2024	Intestines	1
		5

Fifteenth Avenue

106	Peritoneum	1
365	Stomach	1
444	Rectum	1
485	Liver	1
610	Uterus	1
1223	Bladder	1
1318	Tongue	1
1353	Liver	1
		8

Fifth Street

55	Larynx	1
55	Rectum	1
131	Stomach	1
135	Prostate	1
141	Stomach	1
499	Pancreas	1
		6

Fifth Avenue

44	Bladder	1
203	Uterus	1
245	Lungs and pleura	1
329	Liver	1
549	Jaw	1
583	Liver	1
590	Rectum	1
626	Peritoneum	1
650	Stomach	1
658	Breast	1
691	Oesophagus	1
1207	Stomach	1
1216	Ear	1
1244	Gall bladder	1
1251	Stomach	1
1419	Intestines	1
1425	Rectum	1
1454	Liver	1
		18

Filbert Street

554	Bladder	1
559	Jaw	1
760	Breast	1
987	Intestines	1
1135	Lungs	1
1235	Lungs and pleura	1
1704	Stomach	1

By Streets and Houses—Continued

Filbert Street—Continued

1744	Rectum	1
1759	Stomach	1
1774	Liver	1
1782	Bladder	1
2122	Tongue	1
2251	Tongue	1
2490	Ovaries	1
2512	Peritoneum	1
2825	Breast	1
		16

Fillmore Street

230	Intestine	1
520	Uterus	1
607	Ear	1
646	Lungs and pleura	1
648	Stomach	1
649	Liver	1
663	Intestines	1
730	Breast	1
898	Jaw	1
1037	Bladder	1
1550	Lung	1
1840	Intestines	1
1912	Uterus	1
1917	Breast	1
1917a	Neck	1
2302	Uterus	1
2518	Breast	1
2529	Larynx	1
2548	Intestines	1
2607	Rectum	1
2924	Lungs	1
3043	Stomach	1
		22

First Street

269	Stomach	1
305	Pancreas	1
		2

Flora Street

66	Larynx	1

Florida Street

849	Bladder	1
1178	Stomach	1
1227	Lip	1
1509	Rectum	1
		4

Folsom Street

564	Bone	1
830	Stomach	1
926	Rectum	1
977	Liver	1
1038	Oesophagus	1
1051	Liver	1
1258a	Gall bladder	1
1377	Stomach	1
1534	Oesophagus	1
1641	Prostate	1
1675	Stomach	1
1990	Breast	1
2022	Uterus	1
2376	Liver	1
2423	Stomach	1
2489	Bone	1
2598	Brain	1
2652	Intestines	1
2669	Throat	1
2724	Uterus	1
3348	Intestines	1
3340	Stomach	1
3353	Stomach	1
3936	Stomach	1
		24

Forty-second Avenue

570	Oesophagus	1

Forty-third Avenue

682	Breast	1
850	Uterus	1
		2

Forty-fourth Avenue

535	Oesophagus	1
876	Jaw	1
1351	Stomach	1
1447	Uterus	1
		4

Forty-fifth Avenue

1374	Liver	1

Forty-sixth Avenue

875	Bones	1
1223	Bones	1
1435	Stomach	1
		3

Forty-seventh Avenue

724	Face	1
745	Ovary	1
748	Ovary	1
1233	Rectum	1
1265	Breast	1
1275	Oesophagus	1
1526	Rectum	1
		7

Forty-eighth Avenue

762	Uterus	1

Forty-ninth Avenue

1436	Oesophagus	1

Fourteenth Street

247	Stomach	1
454	Uterus	1
716	Larynx	1
744	Stomach	1
1032	Stomach	1
1089	Intestines	1
		6

Fourth Avenue

153	Liver	1
216	Stomach	1
429	Intestines	1
582	Bladder	1
632	Breast	1
579	Stomach	1
663	Intestines	1
1215	Breast	1
1231	Intestines	1
1314	Oesophagus	1
1316	General	1
		11

Fourth Street

44	Uterus	1
83	Breast	1
85	Liver	1
108	Oesophagus	1
192	Stomach	1
193	Stomach	1
192	Liver	1
193	Stomach	1
194	Stomach	1
247	Stomach	1
397	Stomach	1
650	Oesophagus	1
		12

Fourteenth Avenue

295	Liver	1
508	Intestines	1
1229	Uterus	1
1234	Rectum	1
		4

First Avenue

303	Intestines	1
306	Intestines	1
1233	Breast	1
1352	Intestines	1
		4

By Streets and Houses—Continued

Fifth Avenue and Geary Street—(French Hospital)

	Larynx	1

Fifth Avenue and Mission Street—(Lick Hotel)

	Tongue	1

Fourteenth Avenue and Lake Street—(U. S. Marine Hospital)

	Bone	1

Fourteenth Street and Noe Street—(Franklin Hospital)

	Oesophagus	1
	Liver	1
	Stomach	1
	Brain	1
		4

Francisco Street

354c	Stomach	1
828	Breast	1
		2

Franconia Street

339	Intestines	1

Franklin Street

20	General	1
27a	Jaw	1
45	Rectum	1
335	Stomach	1
986	Uterus	1
1029	Intestines	1
1047	Breast	1
1047	Bladder	1
1200	Uterus	1
1350	Stomach	1
1740	Intestines	1
1856	Bone	1
2415	Heart	1
2445	Breast	1
2536	Intestines	1
3050	Uterus	1
		16

Frederick Street

115	Stomach	1
151	Face	1
211	Uterus	1
422	Stomach	1
491	Stomach	1
579	Peritoneum	1
		6

Freemont Street

336	Stomach	1

Fulton Street

326	Kidney	1
514a	Uterus	1
670	Stomach	1
891	Stomach	1
917	Stomach	1
926a	Uterus	1
1116	Intestines	1
1314	Larynx	1
1368	Larynx	1
1374	General	1
1415	Stomach	1
1451	Uterus	1
1465	Uterus	1
1733	Rectum	1
2271	Stomach	1
2295	Vulva	1
2496	Oesophagus	1
3820	Rectum	1
3950	Rectum	1
6000	Breast	1
		20

Ford Street

16	Peritoneum	1
178	Oesophagus	1
		2

Funston Avenue

144	Kidney	1
584	Stomach	1
2320	Uterus	1
2324	Stomach	1
		4

Geary Street

352	Uterus	1
353	Pancreas	1
432	Uterus	1
440	Intestines	1
493	Stomach	1
493	Bone	1
494	Gall bladder	1
505	Lung	1
505	Breast	1
600	Uterus	1
795	General	1
795	Stomach	1
860	Breast	1
909	Tongue	1
965	Liver	1
970	Bladder	1
970	Uterus	1
990	Stomach	1
1035*	Bladder	1
1035	Liver	1
1035	Breast	1
1035	Liver	1
1457	Oesophagus	1
1469	Intestines	1
1732	Intestines	1
1759	Pharynx	1
1898	Liver	1
1941	Breast	1
1983	Rectum	1
2750	Uterus	1
3408	Stomach	1
3434	Liver	1
3650	Stomach	1
4037	Uterus	1
4100	Bladder	1
4221	Uterus	1
4744	Stomach	1
5234	Heart	1
5514a	Liver	1
6041	Intestines	1
7555	Stomach	1
		41

*Charlemagne Apts

Genoa Place

43	Oesophagus	1

Girard Street

442	Stomach	1
896	Breast	1
		2

Gladys Street

8	Stomach	1

Gaven Street

49	Intestines	1

Godeus Street

39	Stomach	1
39	Uterus	1
55	Breast	1
		3

Goethe Street

170	Bone	1

By Streets and Houses—Continued

Golden Gate Avenue

801	Uterus	1
930	Stomach	1
1078	Bladder	1
1141	Tongue	1
1259	Lung	1
1273	Uterus	1
1281	Uterus	1
1293	Intestines	1
1386	Liver	1
1396	Stomach	1
1504	Uterus	1
1511	Breast	1
1524	Liver	1
1700	Liver	1
1737	Prostate	1
1763	Breast	1
1763	Breast	1
1951	Stomach	1
2059	Liver	1
2122	Oesophagus	1
2158	Uterus	1
2158	Intestines	1
2766	Liver	1
2866	Intestines	1
		24

Gough Street

1135	Liver	1
2525	Liver	1
		2

Granada Avenue

254	Uterus	1

Grant Avenue

321	Breast	1
710	Rectum	1
745	Stomach	1
823	Oesophagus	1
823	Stomach	1
824	Nose	1
832	General	1
924	Liver	1
944	Brain	1
1058	Intestines	1
1416	Stomach	1
1434	Stomach	1
1449	Stomach	1
1644	Brain	1
		14

Granville Way

274	Breast	1

Great Highway

1462	Breast	1
1798	Stomach	1
1798	Gall bladder	1
		3

Green Street

612	Lungs and pleura	1
736	Intestines	1
1067	Uterus	1
1123	Neck	1
1241	Liver	1
1265	Tongue	1
1629	Rectum	1
1866	Pancreas	1
1899	Breasts	1
1912	Oesophagus	1
2041	Uterus	1
2080	Rectum	1
2134	Pancreas	1
2277	Liver	1
2508	Intestines	1
2778	Breast	1
		16

Greenwich Street

463	Stomach	1
639	Stomach	1
892	Liver	1
911	Liver	1
918	Stomach	1
927	Peritoneum	1
1135	Uterus	1
1161	Peritoneum	1
1321	Ovary	1
1765	Stomach	1
1776	Intestines	1
2196	Stomach	1
2462	Uterus	1
2775	Neck	1
		14

Greenwood Avenue

65	Peritoneum	1

Grove Street

614	Lungs and pleura	1
716½	Liver	1
940	Lungs	1
1375	Uterus	1
1614	Stomach	1
1672	Uterus	1
2244	Breast	1
2256	Liver	1
		8

Guerrero Street

47	Uterus	1
144	Stomach	1
146	Intestines	1
236a	Uterus	1
244a	Pancreas	1
256a	Tonsil	1
290a	Prostate	1
514	Intestines	1
613	Pharynx	1
628	Larynx	1
636a	Breast	1
650	Rectum	1
717	Uterus	1
741	Liver	1
744	Breast	1
861	Stomach	1
1023	Bone	1
1161	Stomach	1
1203	Bladder	1
1317	Breast	1
1348	Uterus	1
1408	Uterus	1
1417	Kidney	1
1618	Ovary	1
		24

Guttenberg Street

22	Liver	1

Guy Place

17	Bladder	1

Haight Street

369	Intestines	1
393	Lung	1
459	Intestines	1
522	Prostate	1
632	Lungs	1
619	Stomach	1
879	Uterus	1
946	Intestines	1
1010	Breast	1
1128	Ovaries	1
1190	Uterus	1
1190	Intestines	1
1256	Intestines	1
1318	Stomach	1
1630	Liver	1
1640	Uterus	1
1647	Breast	1
1696	Stomach	1
		18

By Streets and Houses—Continued

Hampshire Street

610	Stomach	1
821	Breast	1
864	Stomach	1
964	Uterus	1
1125	Bladder	1
1208	Stomach	1
1218	Breast	1
1263	Skin	1
1284	Stomach	1
1535	Uterus	1
		10

Hancock Street

118	Stomach	1
121	Liver	1
		2

Hanover Street

487	Kidneys	1

Hayes Street

329	Intestines	1
430	Uterus	1
482	Intestines	1
554	Stomach	1
760	Tongue	1
795	Stomach	1
912	Skin	1
923	Stomach	1
965	Intestines	1
1173	Stomach	1
1227	Liver	1
1330	Stomach	1
1362	Liver	1
1534	General	1
1590	Stomach	1
1752	Liver	1
1755	Intestines	1
1821	Breast	1
2166	Stomach	1
2200 to 2300	Ovary	1
		20

Hickory Avenue

306	Stomach	1
477	Uterus	1
		2

Hill Street

24½	Bladder	1
41	Pancreas	1
495	Breast	1
		3

Highland Avenue

31	Breast	1
143	General	1
325	Lip	1
		3

Himmelmann Place

20	Stomach	1

Hoffman Avenue

210	Peritoneum	1

Hollis Street

42	Pancreas	1

Holladay Avenue

312	Stomach	1
448	Lung	1
		2

Hemway Terrace

12	Stomach	1

Holly Park Circle

431	Uterus	1

Henry Street

15	Rectum	1
66	Stomach	1
147	Liver	1
156	Ovary	1
		4

Homestead Street

57	Pancreas	1

Harrison Street

456	Intestines	1
756	Stomach	1
758	Stomach	1
868	Neck	1
876	Rectum	1
2627a	General	1
2710½	Uterus	1
2743	Stomach	1
2872	Uterus	1
2890	Neck	1
2965	Larynx	1
3249	Neck	1
3271	Breast	1
		13

Hartford Street

29	Stomach	1
57	Stomach	1
142	Tongue	1
155	Stomach	1
232	Rectum	1
		5

Howard Street

195	Lung	1
427	Mesentery	1
672	Stomach	1
672	Stomach	1
675	Prostate	1
675	Stomach	1
675	Stomach	1
675	Intestines	1
678	Lungs	1
718	Stomach	1
753	Intestines	1
753	Testes	1
753	Lip	1
753	Stomach	1
753	Larynx	1
753	Prostate	1
753	Oesophagus	1
774	Liver	1
789	Stomach	1
825	Stomach	1
917	Uterus	1
964	Stomach	1
1054	Neck	1
1124	Liver	1
1264	Uterus	1
1264	Stomach	1
1510	Prostate	1
1701	Stomach	1
1788	Lungs	1
1826	Intestines	1
1830a	Stomach	1
1830a	Face	1
1846	Bone	1
2020	Stomach	1
2033	Liver and g. b.	1
2041	Stomach	1
2188	Breast	1
2289	Stomach	1
2405	General	1
2689	Stomach	1
2725	Intestines	1
2894	Uterus	1
2921½	Stomach	1
2995	Stomach	1
		44

By Streets and Houses—Continued

Howth Street

106	Stomach	1
448	Lung	1
		2

Hudson Avenue

1544	Oesophagus	1

Hugo Street

139	Uterus	1
425	Oesophagus	1
525	Pancreas	1
		3

Hyde Street

335	Breast	1
920	Liver	1
1017	Intestines	1
1221	Uterus	1
1224	Prostate	1
1360	Stomach	1
1369	Gall bladder	1
1464	Stomach	1
1502	Rectum	1
1539	Uterus	1
1650	Breast	1
1652	Kidney	1
1703	Stomach	1
1767	Breast	1
2617	Tongue	1
		15

Herman Street

254	Liver	1

Imperial Alley

12	Intestines	1

Ingalls Street

3236	Liver	1

Ingerson Avenue

1054	Uterus	1

Irving Street

430	Bladder	1
450	General	1
4532	Stomach	1
		3

Ivy Avenue

254	Intestines	1

Jackson Street

46	Neck	1
68	Stomach	1
214	Liver	1
610	Tongue	1
658	Bone	1
730	Bladder	1
758	Stomach	1
786	Lungs	1
934	Rectum	1
947	Liver	1
1052	Intestines	1
1064	Uterus	1
1068	Bone	1
1100	Breast	1
1251	Oesophagus	1
1260	Gall bladder	1
1460	Prostate	1
1730	Stomach	1
1817	Stomach	1
1824	Bones	1
1830	General	1
1867	Larynx	1
1925	Tongue	1
2196	Rectum	1
2271	Rectum	1
2401	Stomach	1
2518	Prostate	1
2518	Uterus	1
2900	Bones	1
2907	Intestines	1
2940	Breast	1
2979	Bladder	1
3018	Stomach	1
3430	Breast	1
3485	Kidney	1
3505	Intestines	1
3653	Lung	1
		37

Jasper Place

43	Uterus	1

Jessie Street

180	Stomach	1
181	Lip	1
		2

Johnston Avenue

18	Uterus	1
27	Breast	2
		3

Jones Street

11	Rectum	1
352	Stomach	1
729	Intestines	1
801	Rectum	1
962	Tongue	1
1456	Bone	1
1457	Intestines	1
1608	Intestines	1
1801	Uterus	1
2327	Uterus	1
2336	Stomach	1
		11

Joost Avenue

579	Stomach	1

Jordan Avenue

125	General	1
176	Stomach	1
		2

Jersey Street

222	Throat	1
236	Throat	1
240	Liver	1
283	Breast	1
292	Breast	1
385	Stomach	1
454	Uterus	1
454	Rectum	1
		8

Judah Street

219	Pancreas	1
530	Breast	1
		2

Julian Avenue

125	Liver	1
150	Rectum	1
153	Mouth	1
		3

Juniper Street

140	Stomach	1

Kansas Street

651	General	1
715	Stomach	1
		2

Kearney Street

144	Intestine	1
528	Stomach	1
549	General	1
706	Oesophagus	1
901	Stomach	1
1145	Lung	1
1219	Stomach	1
1431	Bladder	1
1448	Intestines	1
		9

By Streets and Houses—Continued

Key Avenue

1125	Neck	1
1157	Larynx	1
		2

Kimball Place

1	Prostate	1

Kirkham Street

617	Stomach	1
3346	Pancreas	1
		2

Kissling Street

119	Gall bladder	1

Knox Street

106	Stomach	1

Lafayette Street

20	Rectum	1
54	Liver	1
66	Intestines	1
		3

Laguna Street

251	Uterus	1
703	Jaw	1
122	Oesophagus	1
1734	Vulva	1
1833	Liver	1
2010	General	1
2297	Stomach	1
2549	Rectum	1
2757	Stomach	1
3013	Intestines	1
		10

Laguna Honda Blvd., near Dewey Blvd.—(Relief Home)

Uterus	39
Stomach	75
Prostate	23
Tongue	18
Rectum	12
Bone	9
Jaw	17
Neck	11
Pharynx	2
Skin	2
Pancreas	3
Ear	3
General	1
Throat	1
Nose	5
Liver and g. b.	9
Intestines	10
Oesophagus	6
Bladder	4
Head	1
Lungs and pleura	1
Eye	4
Breast	30
Face	4
Larynx	8
Peritoneum	1
Tonsil	1
Vulva and vagina	1
Lip	1
	302

Lake Street

39	Breast	1
135	Breast	1
247	Bladder	1
300	Stomach	1
300	Skin	1
300	Stomach	1
832	Ovary	1
934	Stomach	1
1457	Stomach	1
1520	Stomach	1
1630	Breast	1
2733	Neck	1
		12

Lake St. and Fourth Ave.—(Le Breton Home for Aged)

Stomach	8
Breast	1
	9

Landers Street

84	Uterus	1
141	Oesophagus	1
		2

Lane Street

1207	Stomach	1

Langton Street

136a	Larynx	1
234	Liver	1
		2

Lapidge Street

69	Liver	1

La Playa Street

1306	Skin	1

Larch Street

702	Uterus	1
783	Uterus	1
		2

Larkin Street

923	Breast	1
945	Breast	1
1263	Bone	1
1407	Lungs and pleura	1
1332	Breast	1
1427	Uterus	1
1430	Intestines	1
1435	Uterus	1
1492	Ovary	1
1516	Stomach	1
1532a	Bladder	1
1736	Intestines	1
1831	Stomach	1
2040	Uterus	1
2051	Intestines	1
2125	Liver	1
2224	Prostate	1
2245	Breast	1
2332	Prostate	1
2345	Bladder	1
2409	Uterus	1
2421	Uterus	1
2632	Uterus	1
2656	Breast	1
		24

Latona Street

86	Breast	1

Laura Street

29	Throat	1

Laurel Street

123	Bone	1

Le Conte Avenue

1138	Stomach	1

Lee Avenue

248	Oesophagus	1

Leland Avenue

112	Tongue	1

Lexington Street

167	Intestines	1
176	Stomach	1
274	General	1
356	Eye	1
		4

By Streets and Houses—Continued

Liberty Street

9½	Pancreas	1

Lily Street

183	Prostate	1
235	Stomach	1
		2

Linares Avenue

40	Stomach	1

Linden Street

442	Larynx	1
473	Intestines	1
482	Stomach	1
496	Stomach	1
617	Bladder	1
		5

Lisbon Street

39	Oesophagus	1
230	Rectum	1
379	Brain	1
427	Uterus	1
		4

Lloyd Street

30	Pancreas	1
68	Brains	1
		2

Lobos Street

43	Stomach	1
237	Bone	1
		2

Locust Street

312	Prostate	1

London Street

129	Rectum	1
254	Throat	1
		2

Louisberg Street

162	Stomach	1

Lombard Street

341	Lung	1
440a	Rectum	1
528a	Stomach	1
530	Liver	1
702	Breast	1
1840	Stomach	1
1870	Bladder	1
2057	Prostate	1
2273	Stomach	1
		9

Lundy's Lane

112	Stomach	1

Lyon Street

29	Stomach	1
33	Rectum	1
52	Stomach	1
111	Liver	1
114	Breast	1
120	Intestines	1
323	Uterus	1
641	Stomach	1
713	Gal bladder	1
804a	Face	1
1309	Intestines	1
1322	Uterus	1
1725	Intestines	1
		13

Leavenworth Street

540	Lung	1
540	Intestines	1
645	Pancreas	1
645	Breast	1
1045	Liver	1
1136	Stomach	1
1207	Breast	1
1301	Rectum	1
1450	Rectum	1
1501	Stomach	1
1540	Stomach	1
1717	Stomach	1
1815	Breast	1
2231	Uterus	1
		14

Madrid Street

169	Bladder	1

Main Street

450	Oesophagus	1

Maple Street

308	Breast	1
322	Breast	1
		2

Market Street

639	Breast	1
639	Lung	1
832	Intestines	1
883	Lungs	1
1146	Liver	1
1207	Stomach	1
1208	Rectum	1
1272	Stomach	1
1412	Intestines	1
1872	Stomach	1
2091	Rectum	1
2160	Bladder	1
2246	Stomach	1
		13

Martha Avenue

76	Stomach	1

Mason Street—(Minster Hotel)

312	General	1

Mateo Street

136	Stomach	1

Masonic Avenue

639	Oesophagus	1
720	Rectum	1
736	Brain	1
1126	Intestines	1
1150	Bladder	1
1221	Rectum	1
1306	Oesophagus	1
		7

McCoppin Street

39	Liver	1

Merced Avenue

60	Rectum	1

Middle Street

45	Bladder	1

Milton Street

130	Breast	1

Minna Street

349	Intestines	1
465	Uterus	1
681	Pharynx	1
751	Stomach	1
1366	Liver	1
		5

Miramar Avenue

266	Intestines	1
640	Bladder	1
		2

By Streets and Houses—Continued

Mission Street

689	Pharynx	1
819	Tongue	1
819	Neck	1
971	Intestines	1
1146	Stomach	1
1453	Prostate	1
1722	Intestines	1
2028	Uterus	1
2042	Rectum	1
2061	Lung	1
2175	Stomach	1
2176	Gall bladder	1
2191	Jaw	1
2580	Rectum	1
2861	Neck	1
3045	Stomach	1
3219	Oesophagus	1
3307	Pancreas	1
3342	Breast	1
3372	Stomach	1
3438	Pancreas	1
4294	Skin	1
4835	Stomach	1
		23

McAllister Street

126	Prostate	1
637	Stomach	1
766	Bladder	1
786	Stomach	1
828	Intestines	1
917	Stomach	1
962	Peritoneum	1
1095	Liver	1
1211	Intestines	1
1427	Rectum	1
1438	Stomach	1
1464	Intestines	1
1622	Stomach	1
1818	Liver	1
1929	Liver	1
1986	Breast	1
2516	Uterus	1
2536	Bladder	1
2646	Pancreas	1
2739	Uterus	1
3050	Rectum	1
3196	Intestines	1
		22

Mississippi Street

427	Oesophagus	1

Missouri Street

160	Intestines	1
219	Uterus	1
533	General	1
		3

Mono Street

230	General	1

Montana Street

242	Oesophagus	1

Montgomery Street

605	Neck	1
628	Pancreas	1
735	Intestines	1
1024	Gall bladder	1
1116	Uterus	1
		5

Morse Street

625	Bone	1

Moscow Street

419	Rectum	1

Moss Street

10	Bone	1
37a	Rectum	1
56	Stomach	1
		3

Moulton Street

202	Stomach	1

Moultrie Street

278	Breast	1
367	Stomach	1
376	Lung	1
623	Stomach	1
		4

Munich Street

228	Stomach	1
230	Stomach	1
		2

Napier Alley

4	Uterus	1

Naples Street

9	Intestines	1
623	Intestines	1
944	Stomach	1
		3

Natick Street

31	Liver	1

Natoma Street

522	Breast	1
585	Intestines	1
617	Neck	1
628	Breast	1
1017	Ovary	1
1020	Uterus	1
1082	Ovary	1
		7

Naylor Street

225	Uterus	1

Neptune Street

18	Stomach	1

Nevada Street

502	Uterus	1

Newcombe Avenue

1383	Heart	1
1737	Uterus	1
		2

Newman Street

124	Intestines	1

Newhall Street

1201	Pancreas	1
1515	Lungs	1
		2

Ney Street

102	Uterus	1
146	Stomach	1
		2

Nineteenth Street

1200	Stomach	1
1200	Gall bladder	1
1221	Gall bladder	1
2815	Stomach	1
3620	Ovary	1
3647	Stomach	1
3672	Stomach	1
3987	Stomach	1
4027	Stomach	1
4059	Lip	1
4510	Breast	1
		11

By Streets and Houses—Continued

Nineteenth Avenue

261	Stomach	1
665	General	1
1269	Pancreas	1
1475	Breast	1
1694	Uterus	1
		5

Ninth Avenue

140	Breast	1
218	Rectum	1
218	Rectum	1
233	Intestines	1
258	Gall bladder	1
263	Tonsil	1
334	Rectum	1
420	Pharynx	1
427	General	1
436	Stomach	1
445	Oesophagus	1
618	Pancreas	1
642	Stomach	1
664	General	1
716	Intestines	1
1270	Stomach	1
1280	Uterus	1
1322	Uterus	1
1327	Stomach	1
1480	Intestines	1
1621	Bladder	1
		21

Noe Street

23	Stomach	1
25	Stomach	1
69	Uterus	1
173	Liver	1
190	Oesophagus	1
254a	Oesophagus	1
510	Breast	1
254b	Intestines	1
568	Stomach	1
766	Ovary	1
925	Stomach	1
1033	Stomach	1
1083	Stomach	1
1223	Bone	1
1373	Liver	1
		15

Oak Street

110	Uterus	1
268	Liver	1
268	Bladder	1
457	Liver	1
466	Skin	1
608	Rectum	1
639	Tongue	1
642	Liver	1
799	Uterus	1
799	Kidney	1
829	Prostate	1
914	Uterus	1
958	Rectum	1
986	Intestines	1
1073	Neck	1
1107	Bones	1
1140	Uterus	1
1153	Stomach	1
1153	Uterus	1
1167	Uterus	1
1174	Stomach	1
1427	Uterus	1
1617	Liver	1
		23

Oakwood Street

41	Ovary	1

Octavia Street

8	Uterus	1
129	Stomach	1
263	Head	1
306	Stomach	1
405	Bladder	1
405	Stomach	1
523	Stomach	1
1159	Uterus	1
1230	Ovary	1
1526	Breast	1
1661	Intestines	1
2855	Stomach	1
3022	Uterus	1
		13

O'Farrell Street

235	Stomach	1
340	Lip	1
341	Liver and g. b.	1
436	Breast	1
545	Uterus	1
580	Throat	1
641	Breast	1
700	Oesophagus	1
755	Stomach	1
820	Breast	1
835	Appendix	1
1124	Stomach	1
1165	Lung	1
1175	Bladder	1
1281	Stomach	1
1395	Prostate	1
1614	Peritoneum	1
1614	Uterus	1
1712	Stomach	1
1849	Peritoneum	1
1868	Breast	1
2032	Uterus	1
2075	Stomach	1
2123	General	1
		24

Olive Street

684	Pancreas	1

Oliver Street

16	Stomach	1

Orizaba Avenue

22	Liver	1

Polk Street

743	Uterus	1
915	Uterus	1
1242	Pancreas	1
1315	Bladder	1
1544	Uterus	1
1618	Stomach	1
1740	Rectum	1
2460	Mouth	1
2537	Oesophagus	1
		9

Post Street

775	Stomach	1
775	Intestines	1
851	Rectum	1
921	Intestines	1
1075	Uterus	1
1086	Uterus	1
1355	Ovary	1
1491	Stomach	1
1629	Stomach	1
1676	Stomach	1
1719	Stomach	1
1818	Prostate	1
1920	Rectum	1
1920	Intestines	1
2323	Liver	1
2392	Stomach	1
2503	Gall bladder	1
2573	Stomach	1
2589	Throat	1
		19

Potrero Avenue

914	Bladder	1
960	Liver	1
1062	Breast	1

By Streets and Houses—Continued

Potrero Avenue—Continued

1086	Intestines	1
1146	Oesophagus	1
1208	Stomach	1
		6

Potrero Avenue and 22nd Street—(San Francisco Hospital)

	Lungs	2
	Larynx	1
	Rectum	1
		4

Powers Avenue

34	Liver	1

Prague Street

327	Breast	1

Precita Avenue

22	Stomach	1
215	Liver	1
225	General	1
351	Uterus	1
425	Oesophagus	1
		5

Prentiss Street

80	Liver	1

Presidio

	Tongue	1
	Stomach	1
	Rectum	1
	Stomach	1
	Liver	1
	Lungs	1
		6

Presidio Avenue

246	Lungs	1
422	Stomach	1
		2

Presidio Terrace

4	Lungs	1
10	Oesophagus	1
		2

Princeton Street—(Lick's Old Ladies' Home)

400	Intestines	2

Prospect Avenue

209	Uterus	1

Prosper Street

23	Oesophagus	1

Putman Street

80	Liver	1

Pacific Street

15	Uterus	1
335	Intestines	1
341	Stomach	1
355	Stomach	1
611	Pharynx	1
611	Stomach	1
637	Jaw	1
951	Breast	1
960	Throat	1
		9

Pacific Avenue

1463	Mesentery	1
1492	Uterus	1
1515	Intestines	1
1628½	Stomach	1
1760	Rectum	1
2003	Mesentery	1
2400	General	1
2863	Bladder	1
2889	Intestines	1
2919	Breast	1
2614	Breast	1
		11

Page Street

668	Uterus	1
779	Bone	1
809	Ear	1
909	Lungs	1
1012	Ovary	1
1024	General	1
1051	Breast	1
1053a	Oesophagus	1
1056	Liver	1
1264	Breast	1
1428	Pancreas	1
1439	Prostate	1
1466	Lungs	1
1480	Breast	1
1652	Breast	1
1828	Larynx	1
1844	Pharynx	1
1911	Breast	1
1917a	Bladder	1
1986	Uterus	1
		20

Palm Avenue

19	Breast	1
23	Breast	1
42	Intestines	1
63	Stomach	1
105	Intestines	1
112	Intestines	1
172	Stomach	1
		7

Palou Avenue

1276	Intestines	1
1523	Bone	1
		2

Paris Street

659	Stomach	1

Park Street

322	Stomach	1

Parker Avenue

53	Stomach	1

Park Hill Avenue

*2	Uterus	1
2	Ear	1
2	Stomach	1
127	Stomach	1
		4

*St. Joseph's Hospital

Parnassus Avenue

195	Intestines	1
394	Uterus	1
		2

Parnassus Avenue opp. Second Ave.—(University of Calif. Hospital)

	Oesophagus	1

Pearl Street

33	Breast	1
43	Rectum	1
47	Larynx	1
53	Stomach	1
		4

Peralta Avenue

77	Prostate	1

By Streets and Houses—Continued

Perry Street

72	Prostate	1
143	Stomach	1
159	Intestines	1
		3

Persia Avenue

43	Prostate	1

Piedmont Street

79	Breast	1

Pierce Street

221	Stomach	1
312	Jaw	1
320	Gall bladder	1
362	Breast	1
1922	Stomach	1
2119	Stomach	1
2944	Uterus	1
3256	Stomach	1
		8

Pine Street

21	Stomach	1
480	Intestines	1
755	Liver	1
755	Intestines	1
825	General	1
903	Breast	1
950	Intestines	1
955	Intestines	1
1001	Mesentery	1
1106	Uterus	1
1111	Uterus	1
1111	Lungs	1
1270	Gall bladder	1
1270	Breast	1
1324	Intestines	1
1346	Breast	1
1467	Lungs	1
1485	Liver	1
1847	Intestines	1
1918	Brain	1
2019	Bone	1
2430	Rectum	1
2432	Neck	1
2507	Intestines	2
2507	Stomach	2
2507	Stomach	2
2507	Breast	2
2507	Uterus	2
2507	Breast	2
2507	Ear	1
2507	Cheek	1
2507	Prostate	1
2507	Neck	1
2516	Intestine	1
2613	Liver	1
2564	Uterus	1
2717	Lungs	1
2717	Prostate	1
2762	Uterus	1
2777	Pancreas	1
		46

Pine Place

14	Stomach	1

Plymouth Avenue

1440	Bone	1
1487	Intestines	1
		2

Pond Street

49	Uterus	1

Portola Street

69½	Pancreas	1

Post Street

310	Peritoneum	1
524	Stomach	1
545	Larynx	1
545	Stomach	1
606	Rectum	1
701	Uterus	1
754	Intestines	1
775	Tongue	1
		8

Quesada Avenue

1381	Peritoneum	1
1446	Jaw	1
1764	Stomach	1
2050	Stomach	1
		4

Rae Avenue

69	Peritoneum	1

Railway Street

905	Stomach	1

Ramona Street

61	Breast	1
69	Peritoneum	1
		2

Randolph Street

901	Prostate	1

Raymond Street

2	Uterus	1

Reddy Street

77	Uterus	1

Revere Avenue

1315	Lungs	1
1327	Breast	1
1736	Stomach	1
		3

Richland Avenue

334	Intestines	1
364	Rectum	1
		2

Rivera Street

727	Uterus	1
1121	Jaw	1
		2

Rivoli Street

125	Liver	1
149	Uterus	1
150	Rectum	1
		3

Rolph Street

115	Brain	1

Rose Street

184	Uterus	1

Rosemont Place

37	Stomach	1

Ross Alley

30	Liver	1

Rutland Street

978	Breast	1

Sacramento Street

426	Ovary	1
637	Breast	1
653	Rectum	1
708	Stomach	1
1182	Stomach	1
1260	Pancreas	1
1354	Uterus	1
1446a	Stomach	1
1560	Uterus	1
1560	Stomach	1
1624	Lungs	1
1710	Breast	1
1822	Stomach	1
1822	Liver	1
2153	Intestines	1
2224	Nose	1

By Streets and Houses—Continued

Sacramento Street—Continued

2299	Ovary	1
2325	Rectum	1
2331	Tonsils	1
2610	Intestines	1
2614	Uterus	1
2701	Liver	1
2858	Stomach	1
2918	Intestines	1
3017	Liver	1
3033	Peritoneum	1
3232	Stomach	1
3780	Stomach	1
3780	Liver	1
3810	Bladder	1
3883	Stomach	1
		31

Salmon Alley

46	Uterus	1

San Benito Way

64	Uterus	1

San Bruno Avenue

631	Bone	1
701	Stomach	1
2749	Stomach	1
4550	Gall bladder	1
		4

San Carlos Street

149	Prostate	1
176	Neck	1
269	Stomach	1
273	Brain	1
359	Stomach	1
		5

Sanchez Street

68	Pancreas	1
283	Uterus	1
507	Intestines	1
589	Breast	1
872	Liver	1
1004	Stomach	1
1004	Uterus	1
1024	Larynx	1
1147	Rectum	1
1176	Prostate	1
1417	Liver	1
1532	Uterus	1
1543	Breast	1
		13

San Fernando Way

145	Neck	1

San Jose Avenue

105½	Tongue	1
127	Stomach	1
225	Stomach	1
254	Lungs	1
310	Intestines	1
629	Stomach	1
1961	Stomach	1
1989	Intestines	1
2031	Oesophagus	1
2320	Stomach	1
3001	Face	1
3019	Throat	1
		12

Santa Marina Street

47	Breast	1

Santa Ynez Avenue

68	Stomach	1

Scotia Avenue

78	Bladder	1

Sea Cliff Avenue

190	Neck	1

Sears Street

142	Others of this class	1

Second Avenue

105	Stomach	1
227	Tonsils	1
227	Uterus	1
239	Liver	1
242	Gall bladder	1
258	Liver	1
274	Bladder	1
285	Uterus	1
664	Kidney	1
669	Peritoneum	1
1353	Intestines	1
		11

Seventeenth Street

1233	Neck	1
1401	Pharynx	1
2015	Oesophagus	1
3222	Stomach	1
3480	Stomach	1
3651	Stomach	1
3786	Rectum	1
3823	Uterus	1
3826	Stomach	1
3841	Uterus	1
3906	Tongue	1
4184	Oesophagus	1
4197	Pancreas	1
		13

Seventeenth Avenue

25	Oesophagus	1
264	Stomach	1
272	Lungs	1
742	Breast	1
		4

Seventh Street

135b	Uterus	1

Seventh Avenue

59	Intestines	1
61	Neck	1
159	Vagina	1
230	Intestines	1
231	Rectum	1
259	Bladder	1
337	Liver	1
487	Stomach	1
538	Liver	1
570	Kidney	1
757	Breast	1
776	Bone	1
1249	Liver	1
1429	Intestines	1
1490	Stomach	1
		15

Seville Street

115	Ear	1

Shafter Avenue

1312	Liver	1
1343	Larynx	1
1412	Stomach	1
1422	Lungs	1
1610	Lungs	1
		5

Sharon Street

37	Stomach	1
74	Uterus	1
		2

Sherman Street

12	Uterus	1

Shotwell Street

38a	Uterus	1
58	Oesophagus	1
61	Intestines	1

By Streets and Houses—Continued

Shotwell Street—Continued

114	Bladder	1
162	Bones	1
208	Stomach	1
214	Liver	1
215	Bladder	1
336	Gall bladder	1
390	Tongue	1
561	Intestines	1
579	Prostate	1
606	Prostate	1
607a	Stomach	1
731	Stomach	1
802	Pancreas	1
813	Stomach	1
835	Intestines	1
862	Testes	1
925	Uterus	1
929	Oesophagus	1
1005	Liver	1
1115	Tongue	1
		23

Shrader Street

21	Breast	1
230	Stomach	1
410	Stomach	1
761	Uterus	1
806	Stomach	1
829	Tongue	1
832	Breast	1
1126	Stomach	1
1306	Stomach	1
		9

Sickles Avenue

189	Stomach	1
280	Stomach	1
		2

Silver Avenue—Home for the Aged (Hebrews)

80	Oesophagus	1
80	Rectum	1
80	Bladder	1
80	Peritoneum	1
81	Breast	1
		5

Sixteenth Street

2105	Stomach	1
2805	Intestines	1
2828	Stomach	1
2886	Stomach	1
3048	Stomach	1
3048	Larynx	1
3079	Intestines	1
3428	Liver	1
3444	Uterus	1
3452	Rectum	1
3519	Bone	1
3519	Pancreas	1
		12

Sixteenth Avenue

125	Prostate	1
196	Lungs	1
196	Lip	1
419	Stomach	1
487	Lip	1
526	Pancreas	1
570	Stomach	1
		7

Sixth Street

74	Rectum	1
74	Stomach	1
220	Gall bladder	1
221	Uterus	1
377	Liver	1
494	Pancreas	1
494	Liver	1
		7

Sixth Avenue

36	Prostate	1
42	Intestines	1
64	Brain	1
118	Stomach	1
147	Heart	1
234	Uterus	1
268	Liver	1
551	Breast	1
574	Rectum	1
624	Stomach	1
627	Stomach	1
1279	Stomach	1
		12

South Park Street

70	Uterus	1
165	Liver	1
		2

Spofford Alley

37	Stomach	1
39	Liver	1
50	Stomach	1
		3

Springdale Street

60	Intestines	1
126	Breast	1
208	Liver	1
		3

Spruce Street

344	Stomach	1

Stanyan Street

400	Uterus	1
846	Others of this class	1
954	Tongue	1
1132	Kidney	1
1263	Prostate	1
		5

Staples Avenue

542	Breast	1

State Avenue

3	Liver	1
314	Stomach	1
		2

Steiner Street

101	Stomach	1
912	General	1
950	Mouth	1
1323	Stomach	1
1552	Rectum	1
1718	Tongue	1
1730	Intestines	1
2038	Kidney	1
2945	Uterus	1
3042	Liver	1
		10

Steuart Street

281	Intestines	1

Stillman Street

46	Gall bladder	1
95	Stomach	1
		2

St. Louis Alley

5	Stomach	1

Stockton Street

427	Stomach	1
621	Uterus	1
848	Ovary	1
900	Intestines	1
926	Heart	1

By Streets and Houses—Continued

Stockton Street—Continued

1034	Liver	1
1208	Neck	1
1209	Liver	1
1245	Uterus	1
1304	Stomach	1
1351	Lungs	1
1549	Throat	1
1648	Stomach	1
1723	Intestines	1
1763	Liver	1
1826	Bones	1
1830	Rectum	1
1848	Stomach	1
1955	Stomach	1
		19

Stoneman Street

15	Stomach	1

Sutter Street

*562	Stomach	1
562	Liver	1
562	Prostate	1
562	Intestines	1
635	Stomach	1
701	Liver	1
757	Breast	1
765	Uterus	1
†766	Breast	1
766	Breast	1
766	Larynx	1
795	Tongue	1
801	Breast	1
845	Stomach	1
860	Breast	1
952	Bladder	1
980	Tongue	1
1000‡	General	1
1000	Larynx	1
1000	Breast	1
1000	Peritoneum	1
1035	Mouth	1
1035	Breast	1
1054	General	1
1114	Skin	1
1499‡	Bone	1
1499	Liver	1
1499	Lungs	1
1624	Lungs	1
1733	Uterus	1
1772	Stomach	1
1800	Stomach	1
1808	Breast	1
1846	Stomach	1
1962	Stomach	1
2053	Stomach	1
2065	Stomach	1
2071	Breast	1
2071	Tongue	1
2190	Prostate	1
2302a	Rectum	1
2427	Stomach	1
2496	Intestines	1
2536	Breast	1
2564	General	1
2593	Stomach	1
2616	Uterus	1
2622	Stomach	1
2626	Rectum	1
2738	Skin	1
		50

Sycamore Street

54	Breast	1
72	Breast	1
		2

Scott Street

17	Bones	1
93	Breast	1
244	Stomach	1
311	Stomach	1
363	Tongue	1
464	Bone	1
1123	Prostate	1
1565	Oesophagus	1
1608	Intestines	1
1701	Uterus	1
1814½	Ovary	1
1825	Stomach	1
1829	Face	1
2205	Larynx	1
2305	Rectum	1
2650	Breast	1
2848	Uterus	1
2848	Bones	1
2848	Breast	1
3215	Lungs	1
		20

Teddy Avenue

71	Peritoneum	1

Taylor Street

57	Intestines	1
241	Intestines	1
701	Peritoneum	1
1120	Stomach	1
1302	Breast	1
1340	Breast	1
1922	Liver	1
		7

Tehama Street

317	Cheek	1
323	Rectum	1
422a	Larynx	1
453a	Intestines	1
		4

Tennessee Street

719c	Rectum	1
1107	Rectum	1
		2

Tenth Street

460	Intestines	1

Tenth Avenue

120	Head	1
137	Uterus	1
215	Kidney	1
245	Stomach	1
265	Brain	1
334	Brain	1
349	Liver	1
519	Bladder	1
710	Stomach	1
752	Stomach	1
1441a	Tongue	1
1627	Breast	1
		12

Theresa Street

17	Stomach	1

Third Street

76	Stomach	1
*87	Oesophagus	1
87	Oesophagus	1
149	Jaw	1
151	Rectum	1
†165	Oesophagus	1
165	Bone	1
165	Peritoneum	1
175	General	1
176	Breast	1
190	Oesophagus	1
203	Stomach	1
221	Tongue	1
‡224	Lungs	1

*Regent Hotel
†Apartment House
‡Hotel

*Marley Hotel
†Alta Hotel
‡Colton House

By Streets and Houses—Continued

Third Street—Continued

224	Rectum	1
253	Stomach	1
288	Oesophagus	1
301	Stomach	1
328	Stomach	1
370	Stomach	1
373	Lungs	1
396	Rectum	1
574	Stomach	1
574	Stomach	1
2168	Pancreas	1
2342	Palate	1
3908	Ovary	1
		27

Third Avenue

134	Pancreas	1
219	Rectum	1
235	Stomach	1
426	Rectum	1
478	Lungs	1
554	Prostate	1
639	Uterus	1
682	Peritoneum	1
746	Intestines	1
1209	Prostate	1
1280	Intestines	1
1324	Stomach	1
1373	Uterus	1
		13

Thirteenth Street

352	Uterus	1

Thirtieth Street

275	Uterus	1
308	Stomach	1
308	Liver	1
334	Breast	1
517	Neck	1
		5

Thirty-fifth Avenue

562	Intestines	1
659	Stomach	1
727	Rectum	1
		3

Thirty-fourth Avenue

550	Stomach	1
871	Intestines	1
		2

Thirty-second Avenue

244	Rectum	1
261	Intestines	1
277	Brain	1
427	Intestines	1
1260	Breast	1
		5

Thirty-seventh Avenue

519	Stomach	1
1271	Brain	1
		2

Thirty-sixth Avenue

440	Pancreas	1

Thirty-third Avenue

420	Intestines	1
474	Pancreas	1
698	Stomach	1
2334	Stomach	1
2478	General	1
		5

Thornton Avenue

101	Pancreas	1

Tiffany Avenue

172	Heart	1

Tingley Street

275	Oesophagus	1

Tioga Avenue

156	Uterus	1

Treat Avenue

834	Stomach	1
843	Rectum	1
843	Intestines	1
1106	Tongue	1
1112	Stomach	1
1594	Stomach	1
1604	Stomach	1
		7

Tucker Avenue

10	Stomach	1

Turk Street

34	Uterus	1
140	Mesentery	1
242	Gall bladder	1
275	Breast	1
275	Lungs	1
381	Stomach	1
455	Breast	1
804a	Uterus	1
809	Rectum	1
812	Breast	1
836	Rectum	1
1193	Stomach	1
1193	Liver	1
1416	Breast	1
1681	Tongue	1
1689	Liver	1
1769	Liver	1
1957	Intestines	1
2283	Stomach	1
3136	Liver	1
		20

Twelfth Street

313	Mouth	1

Twelfth Avenue

133	Intestines	1
178	Liver	1
246	Heart	1
276	Pancreas	1
327	Liver	1
522	Intestines	1
522	Uterus	1
568	Stomach	1
611	Intestines	1
731	Intestines	1
1226	Intestines	1
1448	Testes	1
		12

Twentieth Street

1445	Rectum	1
2625	Lungs	1
3223	Uterus	1
3263	Breast	1
3347	Throat	1
3554	Intestines	1
3621	Prostate	1
3652	Liver	1
3688	Liver	1
3938	Prostate	1
3973	Pancreas	1
4020	Intestines	1
4242	Liver	1
4308	Uterus	1
4327	General	1
		15

By Streets and Houses—Continued

Twentieth Avenue

470	Uterus	1
639	Lungs	1
755	Liver	1
761	Intestines	1
		4

Twenty-eight Street

272	Stomach	1
273	Stomach	1
315	Breast	1
452	Breast	1
		4

Twenty-eight Avenue

286	Stomach	1
323	Intestines	1
330	Breast	1
459	Intestines	1
1267	Larynx	1
		5

Twenty-fifth Street

3023	Neck	1
3069	Stomach	1
3371	Larynx	1
3386	Stomach	1
3740	Breast	1
3834	Bone	1
3970½	Uterus	1
3983	Uterus	1
4015	Bone	1
4090	Stomach	1
4152	Stomach	1
4274	Stomach	1
4330	Stomach	1
4385	Stomach	1
4820	Lungs	1
		15

Twenty-fifth Avenue

228	Breast	1
354	Stomach	1
		2

Twenty-first Street

2773	Intestines	1
3227	Breast	1
3243	Face	1
3250	Rectum	1
3360	Stomach	1
3519	Uterus	1
3546	Rectum	1
3881	Stomach	1
3943	Eye	1
		9

Twenty-first Avenue

218	Bones	1
330	Uterus	1
1227	Stomach	1
		3

Twenty-fourth Street

2119	Pancreas	1
2521	Kidney	1
2616	Lungs	1
2616	Uterus	1
2632	Breast	1
2759	Stomach	1
2771	Pancreas	1
2914	Uterus	1
2931	Bone	1
3032	Stomach	1
3337	Ear	1
3380	Stomach	1
3424	Stomach	1
3440	Uterus	1
3440	Intestines	1
3870	Bone	1
3968	Lungs	1
4003	Breast	1
4033	Liver	1
4109	Stomach	1
4414	Intestines	1
		21

Twenty-ninth Street

22	Lungs	1
124	Breast	1
217	Uterus	1
222	Liver	1
421	Oesophagus	1
		5

Twenty-ninth Avenue

245	Bone	1
533	Uterus	1
567	Stomach	1
630	Uterus	1
		4

Twenty-second Street

701	Intestines	1
837	Stomach	1
1518	Uterus	1
2942	Larynx	1
3317	Bladder	1
3338	Face	1
3338	Uterus	1
3378	Bladder	1
3379	Uterus	1
3415	Pancreas	1
3521	Stomach	1
3804	Prostate	1
		12

Twenty-second Avenue

77	Pancreas	1
371	Uterus	1
511	Bone	1
568	Liver	1
		4

Twenty-seventh Street

175	Stomach	1
299	Tongue	1
317	Uterus	1
		3

Twenty-seventh Avenue

439	Liver	1
634	Uterus	1
1346	Uterus	1
1363	Stomach	1
		4

Twenty-sixth Street

3020	Stomach	1
3021	Pharynx	1
3038	Uterus	1
3358	Stomach	1
3850	Liver	1
3851	Stomach	1
4276	Lungs	1
		7

Twenty-sixth Avenue

145	Ovary	1
151	Intestines	1
308	Stomach	1
370	Oesophagus	1
1286	Breast	1
		5

Twenty-third Street

2890	Oesophagus	1
3168	Uterus	1
3273	Bladder	1
3380	Pharynx	1
3509	Uterus	1
3548	Stomach	1
3725	Rectum	1
3917	Rectum	1
4033	Stomach	1
4039	Rectum	1
4107	Breast	1

By Streets and Houses—Continued

Twenty-third Street—Continued

4231	Intestine	1
4241	Intestine	1
4321	Jaw	1
		14

Twenty-third Avenue

682	Breast	1
850	Uterus	1
		2

Union Street

286	Stomach	1
291	Gall bladder	1
294	Kidney	1
378	Liver	1
427	Stomach	1
435	Breast	1
539a	Uterus	1
550	Uterus	1
596	Liver	1
764	Uterus	1
847	Breast	1
896	Stomach	1
901	Stomach	1
1048	Stomach	1
1214	Rectum	1
1224	Stomach	1
1267	Stomach	1
1442	Stomach	1
2113	Rectum	1
2365	Breast	1
2128*	Ovary	1
		21

Upper Terrace

263	Intestines	1

Utah Street

310	Lungs	1
612	Liver	1
621	Breast	1
1212	Stomach	1
		4

Valencia Street

185	Bone	1
391	Uterus	1
436	Uterus	1
797a	Intestines	1
836	Stomach	1
868	Liver	1
928	Breast	1
1013	Uterus	1
1016	Bone	1
1041	Stomach	1
1061	General	1
1316a	Breast	1
1427	Stomach	1
		13

Vallejo Street

416	Rectum	1
440a	Heart	1
469	Bone	1
581	Stomach	1
705	Intestines	1
744	Stomach	1
752	Prostate	1
766	Stomach	1
826	Breast	1
858	Stomach	1
866	Stomach	1
929	Liver	1
944	Intestines	1
1019a	Uterus	1
1227	Intestines	1
1365	Stomach	1
1542	Oesophagus	1
1624	Intestines	1
1632	Breast	1
1721	Stomach	1
1921	Bones	1
1960	Liver	1
2467	Rectum	1
		23

Valley Street

226	Stomach	1
226	Intestines	1
620	Neck	1
		3

Van Ness Avenue

315	Peritoneum	1
512	Pancreas	1
840	General	1
840	Intestines	1
840	Stomach	1
851	Stomach	1
1015	Stomach	1
1040	Skin	1
1040	Lungs	1
2360	Bone	1
2400	Pancreas	1
2802	Bone	1
2918	Breast	1
		13

Vermont Street

944	Kidney	1
1157	Gall bladder	1
1418	Stomach	1
1431	Liver	1
		4

Vienna Street

379	Oesophagus	1
747	Pancreas	1
		2

Virginia Avenue

215	Neck	1
376	Ovary	1
		2

Waller Street

216	Prostate	1
527	Uterus	1
540	Breast	1
541	Uterus	1
579	Intestines	1
663	Oesophagus	1
720	Stomach	1
722	Tongue	1
1212	Larynx	1
1285	Liver	1
1458	Breast	1
1473	Liver	1
1524	Uterus	1
1548	Stomach	1
1585	Breast	1
1600	Breast	1
1644	Stomach	1
1781	Stomach	1
		18

Walnut Street

343	Stomach	1

Walter Street

30	Breast	1
68	Pancreas	1
		2

Washington Street

502	Skin	1
502	Rectum	1
541	Pancreas	1
541	Prostate	1
708	Breast	1
736	Liver	1
750	Stomach	1
801	Stomach	1
820	Liver	1
845	Stomach	1
858	Stomach	1

By Streets and Houses—Continued

Washington Street—Continued

858	Liver	1
870	Stomach	1
874	Breast	1
884	Stomach	1
901	Intestines	1
1034	Rectum	1
1370	Neck	1
1434	Oesophagus	1
1449	Uterus	1
1450	General	1
1450	Breast	1
1485	Tonsils	1
1559	Skin	1
1622	Intestines	1
1671	Breast	1
1690	Intestines	1
2226	Breast	1
2510	Stomach	1
2921	Bladder	1
3023	Lungs	1
3169	Uterus	1
3107	Liver	1
3363	Rectum	1
3650	Uterus	1
3978	Uterus	1
		36

Waverly Place

32	Heart	1
155	Intestines	1
		2

Webster Street

72	Uterus	1
74	Intestines	1
97	Stomach	1
511	Pancreas	1
521	Breast	1
830	Intestines	1
1953a	Uterus	1
1955	Stomach	1
2015	Kidney	1
2212	Stomach	1
2313	Stomach	1
2813	Intestines	1
2962	Prostate	1
		13

Wentworth Place

24	Stomach	1
55	Larynx	1
60	Stomach	1
		3

Westwood Drive

42	Tongue	1

White Street

32	Uterus	1

Whitney Street

229	Stomach	1

Wilde Avenue

314	Oesophagus	1
407	Uterus	1
		2

Willard Street

234	Larynx	1
336	Stomach	1
338	Lungs	1
		3

Williams Avenue

320	Uterus	1

Wisconsin Street

539	Liver	1

Winfield Street

16	Stomach	1
133	Vulva	1
215	Prostate	1
		3

Wool Street

15	General	1

Woodward Street

37	Stomach	1
54	Stomach	1
		2

Yerba Buena Avenue

70	Breast	1

York Street

263	Breast	1
723	Larynx	1
804	Stomach	1
853	Stomach	1
964	Breast	1
1222	Liver	1
1377	Rectum	1
		7

Yosemite Avenue

1726	Neck	1

Zoe Street

45	Vulva	1

Unknown	38
Non Residents	758

County Jail

Brain	1
Rectum	1
	2

At Sea

Pancreas	2
Rectum	1
Brain	1
Stomach	11
Prostate	1
Bone	2
Face	1
Skin	1
Mesentery	1
Larynx	1
	22

U. S. Army

Lung	1
Bladder	1
Larynx	1
	3

APPENDIX F

CANCER MORTALITY OF BOSTON, MASS.—1920-1924

BY STREETS AND HOUSES

A Street

5	Rectum	1
47	Oesophagus	1
52	Prostate	1
70	Uterus	1
243	Intestines	1
		5

Abbott Street

20	Rectum	1
82	Uterus	1
162	Stomach	1
		3

Abbottsford Street

35	Lungs	1

Adams Street

10	Intestines	1
10	Liver	1
30	Neck	1
41	Stomach	1
56	Liver	1
61	Liver	1
99	Stomach	1
114	Liver	1
150	Liver	1
194	Appendix	1
320	Breast	1
337	Lungs	1
373	Breast	1
385	Liver	1
473	Peritoneum	1
500	Rectum	1
888	Pancreas	1
1058	Peritoneum	1
1187	Liver	1
		19

Adelaide Street

5	Prostate	1
6	Stomach	1
		2

Ainsley Street

52	Uterus	1
69	Breast	1
		2

Ainsworth Street

27	Breast	1
39	Liver	1
		2

Akron Street

8	Stomach	1
14	Intestines	1
		2

Alaric Street

3	Lip	1
15	Uterus	1
		2

Albany Street

69	Uterus	1
91	Oesophagus	1
299	Intestines	1
849	Pharynx	1
912	Ovaries	1
916	Throat	1
953	Intestines	1
		7

Albion Street

17	Stomach	1
26	Breast	1
34	Stomach	1
		3

Albemarle Street

6	Uterus	1

Albert Street

2	Lungs	1
5	Uterus	1
		2

Aldie Street

1	Intestines	1
26	Intestines	1
43	Uterus	1
50	Peritoneum	1
		4

Aldrich Street

100	Intestines	1

Aldenworth Street

62	Liver	1

Alexander Street

64	Liver	1
96	Uterus	1
109	Stomach	1
		3

Alleghany Street

2	Uterus	1
4	Intestines	1
14	Uterus	1
		3

Allen Street

17	Intestines	1
31½	Tongue	1
53	Stomach	1
55½	Uterus	1
68	Gall bladder	1
		5

Allston Heights

4	Stomach	1
4	Lung	1
		2

Allston Place

8	Bladder	1

Allston Street

2	Lung	1
10	Stomach	1
16	Intestines	1
33	Liver	1
51	Rectum	1
169	Ovary	1
		6

Alpha Road

11	Breast	1
32	Breast	1
		2

Alaska Street

20	Uterus	1

By Streets and Houses—Continued

Alpine Street
24 Heart 1
33 Intestines 1
2

Alther Street
2 Stomach 1
11 Intestines 1
2

Alveston Street
5 Breast 1
23 Breast 1
2

Amboy Street
1 Intestines 1

Ambrose Street
1 Jaw 1

Amherst Street
103 Bladder 1

Amory Street
81 Oesophagus 1
372 Intestines 1
384 Jaw 1
3

Amory Terrace
10 Breast 1

Andrew Place
1 Stomach 1

Anita Terrace
15 Stomach 1

Anson Street
18 Breast 1

Anthony Place
1 Breast 1

Antrim Street
5 Bladder 1
8 Breast 1
2

Appian Way
5 Nose 1

Appleton Street
40 Liver 1
55 Uterus 1
57 Liver 1
72 Ovary 1
101 Jaw 1
109 Liver 1
151 Stomach 1
7

Anthony Street
3 Uterus 1

Arborway
22 Uterus 1

Arcadia Street
3 Intestines 1
5 Tongue 1
12 Intestines 1
16 Uterus 1
4

Archdale Road
24 Liver 1

Argyle Street
7 Breast 1
18 Uterus 1
2

Arlington Street
2 Intestines 1
61 Intestines 1
64 Liver 1
75 Prostate 1
147 Breast 1
151 Stomach 1
151 Uterus 1
161 Uterus 1
161 Prostate 1
9

Armandine Street
35 Peritoneum 1
51 Intestines 1
99 Intestines 1
3

Armington Street
26 Uterus 1

Arnold Street
10 Uterus 1

Arthur Street
2 Head 1
68 Pleura 1
2

Ash Street
36 Stomach 1
36 Stomach 1
2

Ashburnham Street
Rectum 1

Ashford Court
4 Peritoneum 1

Ashland Street
31 Larynx 1
158 Uterus 1
212 Pancreas 1
3

Ashmont Park
1 Uterus 1

Ashmont Street
27 Lung 1
195 Kidney 1
406 Intestines 1
212 Brain 1
345 Intestines 1
449 Lung 1
581 Intestines 1
7

Aspen Street
2 Lung 1

Asticon Street
15 Larynx 1

Acton Street
8 Rectum 1

Astor Street
41 Oesophagus 1
41 Stomach 1
2

Astoria Street
66 Bladder 1

Asylum Street
6 Bone 1
11 Stomach 1
2

By Streets and Houses—Continued

Athelwold Street

26	Face	1
29	Neck	1
43	Uterus	1
		3

Atherton Street

3	Rectum	1
5	Stomach	1
		2

Atwood Square

21	Tongue	1

Auburn Street

2	Gall bladder	1
3	Neck	1
8	Uterus	1
10	Intestines	1
13	Uterus	1
16	Ovary	1
22	Brain	1
28	Breast	1
38	Uterus	1
		9

Aukland Street

4	Stomach	1
64	Bladder	1
67	Liver	1
		3

Audubon Road

207	Bone	1
211	Bladder	1
448	Larynx	1
		3

Austin Street

12	Stomach	1
34	Mouth	1
		2

Avon Street

72	Breast	1

B Street

9	Bladder	1
98	Liver	1
		2

Bailey Street

77	Bone	1

Brainbridge Street

19	Bladder	1
23	Tongue	1
53	Liver	1
81	Skin	1
		4

Baird Street

31	Bone	1

Baker Street

23	Oesophagus	1

Bakersfield Street

59	Liver	1

Baldwin Street

84	Oesophagus	1

Ball Street

10	Prostate	1
14	Uterus	1
18	Uterus	1
22	Stomach	1
		4

Balsam Street

5	Ovary	1

Barnard Street

7	Neck	1

Barry Street

16	Pancreas	1
43	Oesophagus	1
		2

Barstow Street

5	Breast	1

Bartlett Street

3	Stomach	1
10	Intestine	1
17	Oesophagus	1
37	Bladder	1
38	Uterus	1
98	Stomach	1
125	Intestines	1
		7

Barton Street

19	Pancreas	1
44	Stomach	1
72	Stomach	1
		3

Batavia Street

1	Stomach	1
21	Breast	1
31	Rectum	1
37	Tongue	1
49	Pharynx	1
		5

Batchelder Street

1	Stomach	1
1	Gall bladder	1
		2

Bay State Road

74	Lip	1
135	Rectum	1
200	Liver	1
270	Liver	1
		4

Baxter Street

31	Stomach	1
77	Uterus	1
		2

Bayswater Street

58	Prostate	1
66	Oesophagus	1
		2

Beach Street

27	Uterus	1
61	Liver	1
		2

Beacon Street (H. P.)

7	Stomach	1
78	Pancreas	1
136	Uterus	1
		3

Beacon Street

105	Pancreas	1
106	General	1
121	Stomach	1
143	Uterus	1
196	Stomach	1
251	Intestines	1
283	Ovary	1
287	Stomach	1
287	General	1
289	Intestines	1
295	Breast	1
316	Uterus	1
335	Breast	1
353	Intestines	1

By Streets and Houses—Continued

Beacon Street—Continued

357	Breast	1
405	Stomach	1
445	Lungs	1
451	Stomach	1
462	Oesophagus	1
535	Uterus	1
535	Stomach	1
535	Lungs	1
784	Stomach	1
800	Oesophagus	1
800	Breast	1
836	Stomach	1
851	Liver	1
857	Intestines	1
1935	Uterus	1
1924	Rectum	1
		30

Beaufort Street

10	Stomach	1

Beaumont Street

99	Breast	1

Bearse Avenue

34	Ovary	1

Beckerstaff Street

50	Stomach	1

Beech Street

	Vulva	1
170	Uterus	1
306	Liver	1
451	Stomach	1
		4

Beech Glen

60	Stomach	1

Bedford Road

48	Stomach	1

Belder Square

3	Lung	1

Belfort Street

30	Skin	1
41	Stomach	1
		2

Belgrade Avenue

134	Oesophagus	1
145	Stomach	1
292	Breast	1
		3

Belle Avenue

47	Throat	1
59	Throat	1
		2

Bellflower Avenue

30	Intestines	1

Bellevista Place

23	Stomach	1

Bellevue Street

51	Stomach	1
101	Throat	1
116	Stomach	1
		3

Bellevue Avenue

84	Stomach	1

Bellevista Street

5	Breast	1

Belmore Terrace

9	Uterus	1
55	Breast	1
		2

Bennett Street

	Lungs	1
8	Breast	1
20	Throat	1
127	Breast	1
		4

Bennington Street

57	Uterus	1
175	Stomach	1
212	Liver	1
215	Oesophagus	1
226	Uterus	1
235	Stomach	1
242	Stomach	1
402	Bladder	1
432	Intestines	1
445	Stomach	1
460	Rectum	1
691	Liver	1
699	Liver	1
699	Rectum	1
902	Oesophagus	1
1004	Liver	1
1008	Gall bladder	1
1024	Stomach	1
1183	Face	1
		19

Bentham Road

11	Tonsil	1

Benton Street

19	Ear	1
21	Uterus	1
		2

Bentley Street

26	Uterus	1

Berkeley Street

52	Kidney	1
78	Prostate	1
143	Bladder	1
237	Stomach	1
		4

Bernard Street

68	Bladder	1

Bertram Street

20	Uterus	1

Bickerstaff Street

33	Uterus	1

Bigelow Street

16	Uterus	1

Billings Street

45	Tongue	1

Binney Street

2	Intestines	1
2	Liver	1
16	Stomach	1
17	Breast	1
93	Stomach	1
		5

Birchwood Street

63	Rectum	1

Bird Street

83	Intestines	1

Blackwood Street

7	Intestines	1

Blagden Street (Langham Apts.)

22	Peritoneum	1

Blake Street

24	Liver	1

By Streets and Houses—Continued

Blanche Street

8	Uterus	1
19	Pancreas	1
		2

Bloomfield Street

10	Uterus	1
41	Intestines	1
58	Liver	1
79	Intestines	1
79	Stomach	1
		5

Blossom Street
(Brother and Sister)

12	Liver	1
12	Stomach	1
		2

Blue Hill Avenue (Parkway)

	Bone	1
24	Liver	1
35	Uterus	1
53	Uterus	1
63	Uterus	1
66	Throat	1
66	Uterus	1
79	Face	1
168	Neck	1
179	Bladder	1
305	Stomach	1
326	Intestines	1
372	Liver	1
384	Throat	1
381	Breast	1
386	Stomach	1
495	Liver	1
566	Lungs	1
814	Lungs	1
899	Liver	1
917	Jaw	1
1232	Liver	1
1234	Pancreas	1
1253	Liver	1
1410	Peritoneum	1
1412	Bone	1
1420	Stomach	1
1531	Skin	1
1585	Rectum	1
		29

Boardman Street

33	Intestines	1

Bolton Street

92	Jaw	1
120	Tongue	1
235	Lungs	1
		3

Border Street

38	Stomach	1
172	Breasts	1
364	Bone	1
373	Breast	1
		4

Boston Street

74	Liver	1
104	Breast	1
108	Uterus	1
135	Intestines	1
151	Uterus	1
173	Intestines	1
		6

Boulevard Terrace

25	Uterus	1
27	Intestines	1
		2

Bowdoin Street

11	General	1
17	Stomach	1
18	Stomach	1
29	Uterus	1
44	Oesophagus	1
58	Uterus	1
76	Ovary	1
80	Rectum	1
97	Breast	1
98	Liver	1
141	Liver	1
186	Liver	1
244	Uterus	1
245	Stomach	1
430	Intestines	1
		15

Bower Street

8	Stomach	1
26	Rectum	1
43	Stomach	1
80	Stomach	1
179	Stomach	1
		5

Bowen Street

261½	Intestines	1
265	Throat	1
266	Stomach	1
		3

Bowman Street

15	Breast	1

Boyden Street

18	Stomach	1

Boylston Street

31	Uterus	1
33	Stomach	1
128	Breast	1
192	Oesophagus	1
729	Breast	1
839	Ovary	1
913	Intestines	1
1069	Heart	1
1069	Prostate	1
Cor. Claren.		
	rectum	1
(Hotel Brunswick)		
		10

Bradfield Street

74	Breast	1

Bradford Street

3	Intestines	1
24	Stomach	1
		2

Bradlee Street

19	Prostate	1
20	Bladder	1
		2

Bradley Street

30	Uterus	1
127	General	1
		2

Bradwood Street

47	Lungs	1
77	Breast	1
		2

Braemore Road

26	Neck	1

Bragdon Street

56	Uterus	1
76	Tonsil	1
91	Penis	1
		3

By Streets and Houses—Continued

Brainerd Road

12	Prostate	1
110	Bone	1
119	Pancreas	1
		3

Brayton Road

96	Stomach	1

Bremen Street

36	Neck	1
284	Breast	1
		2

Brent Street

17	Oesophagus	1

Brigham Street

7	Stomach	1

Briggs Place

8	Cervix	1

Brighton Avenue—(Mt. St. Joseph Acad.)

	Intestines	1
1	Uterus	1
35	Tongue	1
56	Uterus	1
99	Stomach	1
101	Stomach	1
105	Tongue	1
109	Gall bladder	1
133	Stomach	1
185	Uterus	1
		10

Broadway

9	Bladder	1
76	Stomach	1
149	Jaw	1
245	Stomach	1
287a	Intestines	1
205	Mesentery	1
291	Stomach	1
329	Oesophagus	1
358	Stomach	1
365	Lung	1
389	Liver	1
397a	Stomach	1
406	Pancreas	1
504	Pancreas	1
510	Neck	1
532	Rectum	1
564	Stomach	1
751	Intestines	1
727	Uterus	1
778	Liver	1
852	Liver	1
907	Rectum	1
907	Breast	1
925	Uterus	1
940	Stomach	1
		25

Brackett Street

40	Vagina	1

Bradford Street

	Bone	1

Bromley Park

14	Gall bladder	1
27	Oesophagus	1
55	Face	1
		3

Brook Avenue

4a	Intestines	1
6	Peritoneum	1
9	Stomach	1
95	Rectum	1
98	Rectum	1
30	Breast	1
		6

Brookdale Street

8	Bladder	1
12	Stomach	1
34	Stomach	1
36	Kidney	1
42	Stomach	1
42	Stomach	1
		6

Brookford Street

12	Throat	1
45	Stomach	1
		2

Brookline Avenue

264	Uterus	1
264	Pancreas	1
476	Uterus	1
		3

Brookline Street

270	Uterus	1

Brooks Street

62	Stomach	1
80	Stomach	1
88	Stomach	1
103	Prostate	1
104	Ovaries	1
104	Peritoneum	1
146	Stomach	1
220	Stomach	1
		8

Brookside Avenue

10	Uterus	1
58	Oesophagus	1
79	Stomach	1
		3

Bromley Street

27	Kidney	1

Brown Avenue

152	Stomach	1

Browning Avenue

7	Ovary	1
15	Stomach	1
36	Pancreas	1
47	Larynx	1
		4

Brunswick Street

6	Stomach	1
85	Lungs	1
116	Stomach	1
210	Breast	1
95	Lungs	1
		5

Bryant Street

	Bladder	1

Buckley Avenue

10a	Uterus	1

Buckminster Street

19	Uterus	1
24	Prostate	1
24	Lung	1
		3

Bulfinch Place

8	Rectum	1

Bullard Street

12	Uterus	1
17	Liver	1
17	Tongue	1
		3

By Streets and Houses—Continued

Bunker Hill Street

1½	Jaws	1
49	Stomach	1
77½	Prostate	1
128	Bladder	1
141	Stomach	1
148	Tongue	1
149	Stomach	1
312	Bladder	1
322	Stomach	1
406	Neck	1
436	Breast	1
443	Uterus	1
		12

Birch Street

64	Liver	1

Burr Street

19	Brain	1

Burrell Street

51	Peritoneum	1
93	Ear	1
		2

Burroughs Street

17	Uterus	1
20	Liver	1
48	Intestines	1
		3

Burt Street

88	Cervix	1

Burton Avenue

5	Stomach	1

Bushnell Street

19	Uterus	1

Bussey Street

250	Uterus	1

Butler Street, Dorchester

5	Stomach	1

Butler Avenue

68	Intestines	1

Buttonwood Street

32	Stomach	1
35	Breast	1

Bynner Street

11	Intestines	1

Byron Street

81	Jaw	1

Burbank Street

14	Bone	1

Binney cor. Francis—(House Good Samaritan)

	Uterus	1

C Street

81	Bone	1
171	Stomach	1
236	Uterus	1
284	Breast	1
		4

Cabot Street

48	Breast	1
137	Liver	1
164	Uterus	1
185	Tongue	1
194	Peritoneum	1
237	Rectum	1
245	Stomach	1
		7

Caldwell Street

3	Breast	1
7½	Uterus	1
25	Stomach	1
		3

Call Street

20	Breast	1
58	Stomach	1
67	Stomach	1
89	Uterus	1
		4

Callender Street

82	Prostate	1
197	Intestines	1
		2

Calumet Street

39	Stomach	1
94	Bone	1
97	Jaw	1
159	Neck	1
		4

Cambridge Street

	Pancreas	1
12	Stomach	1
39	Oesophagus	1
39	Bladder	1
39	Stomach	1
109	Bone	1
176	Tongue	1
185	Liver	1
197	Stomach	1
219	Stomach	1
575	Rectum	1
731	Stomach	1
		12

Camden Street

87	Breast	1
93	Bladder	1
120	Stomach	1
		3

Cannon Street

11	Rectum	1
20	Intestines	1
		2

Canterbury Street—Cor. Austin Street—(Boston State Hospital)

	Gall bladder	1
	Rectum	1
20	General	1
800	Uterus	1
418	Uterus	1
		5

Canton Court

2	Rectum	1

Canton Place

1	Tongue	1

Cardington Street

3	Pancreas	1

Carey Place

2	Uterus	1

Carlisle Street

12	Breast	1

Carlow Street

1	Stomach	1

Carmel Street

6	Intestines	1
9	Bone	1
17	Tongue	1
		3

By Streets and Houses—Continued

Carolina Avenue

46	Face	1
82	Neck	1
131	Intestines	1
131	Uterus	1
		4

Carlos Street

2	Peritoneum	1

Carruth Street

80	Bladder	1

Carson Street

5	Stomach	1
8	Intestines	1
		2

Castle Gate Road

9	Intestines	1
21	Liver	1
		2

Carver Street

54	Oesophagus	1
71	Tongue	1
77	Prostate	1
381	Lungs	1
		4

Casey Street

17	Stomach	1

Cassnet Street

4	Stomach	1

Castle Street

92	Larynx	1

Catawba Street

35	Breast	1

Causeway Street

14	Throat	1

Cazenove Street

6	Bladder	1
6	Bladder	1
		2

Cedar Street

7	Intestines	1
20	Intestines	1
22	Intestines	1
49	Breast	1
58	Bladder	1
71	Intestines	1
89	Uterus	1
115	Tonsil	1
146	Throat	1
		9

Centre Street

16	Ovaries	1
51	Intestines	1
64	Prostate	1
74	Intestines	1
85	Intestines	1
102	Intestines	1
220	Liver	1
221	Breast	1
246	Liver	1
316	Stomach	1
321	Uterus	1
321	Vulva	1
330	Ovary	1
337	Breast	1
338	General	1
355	Uterus	1
360	Larynx	1
370	Larynx	1
386	Stomach	1
396	Intestines	1
398	Tongue	1
454	Stomach	1
541	Stomach	1
576	Rectum	1
590	Rectum	1
600	Kidney	1
600	Intestines	1
1071	Liver	1
1551	Stomach	1
2155	Larynx	1
2449	Liver	1
		31

Centre Place

2	Rectum	1

Centre Terrace

15	Larynx	1

Central Avenue

14	Uterus	1

Centervale Park

2	Intestines	1

Chadwick Street

10	Breast	1

Chamberlain Street

15	Liver	1

Chambers Street

9	Stomach	1
13	Breast	1
18	Liver	1
77	Stomach	1
83	Bladder	1
136	Brain	1
143	Liver	1
150	Lungs	1
		8

Chamblet Street

2	Stomach	1

Champney Street

27	Uterus	1
71	Lip	1
98	Breast	1
107	Uterus	1
114	Breast	1
140	Breast	1
		6

Chapman Street

7	Throat	1
20	Pancreas	1
		2

Chappie Street

61	Stomach	1

Charlie Street

2	Stomach	1
13	Intestines	1
28	Stomach	1
75	Stomach	1
81	Stomach	1
100	Stomach	1
121	Nose	1
166	Breast	1
185	Intestines	1
265	Ovary	1
		10

Charlesgate East

24	Bladder	1

Charlesgate West—(Hotel Canterbury)

	Uterus	1

By Streets and Houses—Continued

Charlesgate Street

20	Prostate	1
20	Bone	1
		2

Charter Street

23	Intestines	1

Chase Street

8	General	1

Chaucer Street

43	Liver	1

Chauncy Place

10	Kidney	1
11	Breast	1
		2

Chelsea Street

30	Stomach	1
98	Pancreas	1
131	Bone	1
145	Stomach	1
180	Breast	1
189	Uterus	1
231	Bladder	1
285	Bladder	1
352	Oesophagus	1
399	Uterus	1
426	Intestines	1
437	Oesophagus	1
		12

Cherokee Street

14	Stomach	1

Cherry Street

12	Uterus	1

Cherwood Street

8	Stomach	1

Chestnut Avenue

50	Liver	1
138	Prostate	1
168	Stomach	1
236	Rectum	1
299	Intestines	1
		5

Chestnut Street

12	Lung	1
40	Breast	1
47	Rectum	1
54	Breast	1
65	Rectum	1
98	Stomach	1
294	Uterus	1
		7

Chestnut Hill Avenue

15	Bladder	1
35	Breast	1
50	Stomach	1
235	Stomach	1
239	Gall bladder	1
		5

Cheshire Street

20	Liver	1

Chesier Place

10	Prostate	1

Chester Street

20	Breast	1
21	Oesophagus	1
71	Lung	1
76	Liver	1
137	Neck	1
		5

Child Street

10c	Stomach	1
103	Larynx	1
110	Oesophagus	1
		3

Church Street

16	Vulva	1

Chiswick Street

1	Bone	1
37	Oesophagus	1
99	Breast	1
153	Intestines	1
		4

Circuit Street

14	Stomach	1
31	Bladder	1
50	Stomach	1
59	Intestines	1
68	Bone	1
		5

Clapp Street

16	Pleura	1

Cherry Street

12	Uterus	1

Cherwood Street

8	Stomach	1

Clarendon Street

8	Tongue	1
23	Oesophagus	1
30	Oesophagus	1
51	General	1
		4

Claremont Street

8	Stomach	1
26	Liver	1
27	Rectum	1
		3

Claremont Park

31	Intestines	1

Clark Place

5	Liver	1

Clarkson Street

54	Breast	1

Clarkwood Street

61	Liver	1

Clayton Street

8	Uterus	1

Claybourne Street

27	Uterus	1

Clement Avenue

56	Uterus	1
78	Rectum	1
79	Face	1
		3

Clement Park

15	Stomach	1

Cleveland Street

37	Liver	1

Cliff Street (Rox.)

33	Stomach	1
48	Larynx	1
		2

By Streets and Houses—Continued

Clifford Street

40	Intestines	1
50	Uterus	1
63	Pancreas	1
64	Intestines	1
		4

Clifton Street

68	Liver	1

Cliftondale Street

57	Intestines	1
65	Stomach	1
		2

Clover Street

10	Intestines	1

Cobb Street

8	Breast	1
21	Uterus	1
		2

Coffey Street

28	Liver	1
34	Breast	1
		2

Cohasset Street

52	Intestines	1

Colberg Avenue

18	Breast	1
37	Uterus	1
		2

Coleman Street

35	Breast	1

Collender Street

123	Ovary	1

Colonial Avenue

55	Stomach	1

Colonial Road

39	Uterus	1
56	Liver	1
		2

Columbia Road

90	Pancreas	1
179	Intestines	1
238	Prostate	1
250	Uterus	1
252	Intestines	1
288	Jaw	1
460	Intestines	1
461	Intestines	1
462	Breast	1
465	Uterus	1
495	Breast	1
639	Stomach	1
665	Ovary	1
675	Kidney	1
734	Bladder	1
781	Intestines	1
861	Intestines	1
1322	Ovary	1
1506	Stomach	1
1618	Intestines	1
1756	Intestines	1
		21

Columbus Avenue

184	Kidney	1
200	Bone	1
218	Uterus	1
251	Intestines	1
282	Ovary	1
325	Throat	1
352	Lung	1
415	Breast	1
437	Intestines	1
455	Liver	1
455	Bones	1
474a	Bladder	1
495	General	1
520	Breast	1
606	Liver	1
615	Stomach	1
872	Stomach	1
908	Liver	1
985	Stomach	1
1188	Liver	1
1394	Stomach	1
1901	Uterus	1
1905	Oesophagus	1
		23

Columbus Square

8	Rectum	1

Commercial Street

163	Penis	1
177	Palate	1
190	Penis	1
276	Tongue	1
		4

Common Street

31	Oesophagus	1

Commonwealth Avenue—(Hotel Somer't)

	Oesophagus	1
	Lungs	1
35	Intestines	1
48	Prostate	1
50	Uterus	1
88	Lung	1
123	Intestines	1
125	Neck	1
186	Breast	1
286	Breast	1
298	Stomach	1
366	Rectum	1
386	Brain	1
403	Prostate	1
464	Lungs	1
464	Liver	1
464	Intestines	1
496	Bones	1
580	Stomach	1
627	Breast	1
704	Intestines	1
722	Uterus	1
1128	Uterus	1
1135	Pancreas	1
1139	Stomach	1
1160	Uterus	1
1177	Vagina	1
1200	Stomach	1
1202	Uterus	1
1288	Tonsils	1
1295	Uterus	1
1295	Oesophagus	1
1301	Jaw	1
1301	Kidney	1
1309	Stomach	1
1368	Stomach	1
1374	Stomach	1
1395	Stomach	1
1406	Stomach	1
1407	Oesophagus	1
1407	Bone	1
1480	Peritoneum	1
1482	Intestines	1
1486	Ovary	1
1734	Stomach	1
1738	Uterus	1
1738	Lungs	1
1742	Stomach	1
1872	Bladder	1
1896	Bladder	1
1945	Liver	1
		51

Compton Street

92	Rectum	1

By Streets and Houses—Continued

Conant Street

123	Stomach	1

Concord Square—(Boston)

46	Stomach	1

Concord Street

18	Stomach	1
19	Face	1
22	Pancreas	1
73	Intestines	1
		4

Condor Street

7	Kidneys	1
133	Rectum	1
		2

Congress Avenue

101	Pancreas	1

Congress Street

20	Spine	1

Cook Street

18	Uterus	1
34	Prostate	1
48	Breast	1
		3

Cooper Street

14	Peritoneum	1
20	Uterus	1
20	Jaw	1
55	Breast	1
		4

Copeland Street

3	Intestines	1
23	Breast	1
43	Prostate	1
170	Bone	1
		4

Copley Square—(Copley Plaza)

17	Breast	1

Corbet Street

94	Uterus	1

Cordis Street

1	Intestines	1

Corey Road—(Brighton)

267	Oesophagus	1

Corey Street

75	Peritoneum	1
117	Uterus	1
288	Stomach	1
265	Pancreas	1
		4

Cornell Street

19	Breast	1
242	General	1
256	Rectum	1
280	Liver	1
		4

Cornhill Street

250	General	1

Corning Street

12	Uterus	1
23	Oesophagus	1
		2

Cornwall Street

66	Pancreas	1

Corona Street

5	Breast	1
45	Intestines	1
		2

Cortez Street

19	Breast	1

Cortes Street

20	Uterus	1

Corwiss Street

17	Stomach	1

Cottage Park

10	Bone	1

Cottage Street

12	Uterus	1
16	Stomach	1
22	Stomach	1
40	Stomach	1
40	Rectum	1
54	Eye	1
151	Kidney	1
170	Stomach	1
		8

Cotton Street

4	Stomach	1

Courtland Street

6	Pancreas	1

Coventry Street

7	Lungs	1

Crandell Street

9	Stomach	1
14	Stomach	1
		2

Cranston Street

29	Stomach	1

Crawford Street

9	Gall bladder	1
10	Stomach	1
73	Breast	1
65	Stomach	1
65	Uterus	1
68	Brain	1
68	Others	1
98	Neck	1
		8

Creighton Street

54	Stomach	1

Crescent Avenue—(Charlestown)

10	Liver	1
11	Stomach	1
37	Stomach	1
40	Bone	1
		4

Creston Street

19	Lung	1
24	Stomach	1
28	Peritoneum	1
34	Stomach	1
		4

Cross Street

33	Prostate	1
239	General	1
		2

Crowell Street

7	Liver	1

Cummings Road

44	Uterus	1

Cunard Street

39	Breast	1

By Streets and Houses—Continued

Cunningham Street

30	Stomach	1

Cushing Street

	Liver	1
130	Stomach	1
		2

Cushing Terrace

4	Stomach	1
59	Gall bladder	1
		2

Custer Street

38	Liver	1
51	Uterus	1
		2

D Street

102	Neck	1
160	Intestines	1
174	Breast	1
		3

Dacia Street

120	Stomach	1

Dakota Street

24	Oesophagus	1
34	Liver	1
39	Stomach	1
39	Breast	1
42	Uterus	1
51	Uterus	1
67	Intestines	1
75	Uterus	1
78	Liver	1
91	Stomach	1
		10

Dale Street

1	Stomach	1
4	Intestines	1
25	Tongue	1
50	Bone	1
53	Lung	1
56	Breast	1
75	General	1
		7

Dalrymple Street

12	Pancreas	1

Damon Street

15	Stomach	1

Dana Street

147	Uterus	1

Danforth Street

11	Throat	1

Darling Street

22	Oesophagus	1
26	Stomach	1
		2

Dartmouth Street—Cor. Comm.

	Pancreas	1
11	Breast	1
23	Penis	1
23	Breast	1
30	Tongue	1
77	Face	1
98	Uterus	1
175	Lungs	1
194	Intestines	1
280	Intestines	1
		10

Davis Street

16	Stomach	1
17	Rectum	1
17	Breast	1
		3

Davison Street

10	Liver	1
77	Stomach	1
		2

Dawson Street

24	Liver	1

Decatur Street

1	Uterus	1
24	General	1
27	Liver	1
28	Intestines	1
30	Uterus	1
81	Liver	1
		6

Dean Way

4	Uterus	1

Deerfield Street

58	Uterus	1

Deering Road

39	Liver	1

Dell Avenue

7	Breast	1
28	Uterus	1
		2

Denton Terrace

5	Uterus	1
16	Rectum	1
		2

Dennis Street

12	Uterus	1

Derby Place

	Liver	1
3	Uterus	1
		2

Derne Street

6	Intestines	1
8	Palate	1
12	Oesophagus	1
		3

Devon Street

87	Intestines	1
97	Liver	1
136	Lung	1
		3

Dewey Street

9	Stomach	1
26	Rectum	1
36	Stomach	1
		3

Dexter Row

1	Rectum	1

Dickens Street

13	Liver	1
24	Liver	1
27	Uterus	1
27	Uterus	1
40	Uterus	1
		5

Dillaway Street

6	Oesophagus	1

By Streets and Houses—Continued

Dillon Street

18	Uterus	1

Dilworth Street

8	Bladder	1

Ditson Street

14	Oesophagus	1

Dixwell Street

4	Rectum	1

Dixfield Street

10	Uterus	1

Dixwell Street

23	Bone	1

Donneybrook Street

59	Intestines	1
62	Stomach	1
		2

Donovan Street

2	Uterus	1

Dorchester Avenue

63	Rectum	1
165	Stomach	1
167	Bone	1
153	Ovary	1
189	Intestines	1
195	Stomach	1
275	Breast	1
325	Prostate	1
374	Breast	1
596	Liver	1
634	Larynx	1
811	Uterus	1
816	Liver	1
911	Uterus	1
919	Liver	1
922	Kidney	1
928	Stomach	1
1009	Lung	1
1021	Stomach	1
1041	Bone	1
1048	Rectum	1
1084	Rectum	1
1106	Bladder	1
1112	Stomach	1
1153	Jaw	1
1181	Uterus	1
1260	Stomach	1
1288	Pancreas	1
1314	Breast	1
1336	Uterus	1
1337	Intestines	1
1337	Uterus	1
1385	Stomach	1
1407	Uterus	1
1832	Neck	1
2049	Stomach	1
2145	Kidney	1
2151	Stomach	1
2171	Intestines	1
2259	Intestines	1
		40

Dorr Street

21	Stomach	1

Dorrance Street

22	General	1

Dorset Street

15	Breast	1
31	General	1
38	Intestines	1
44	Stomach	1
		4

Douglas Street

9	Oesophagus	1

Dover Street

15	Kidney	1
20	Tongue	1
21	General	1
34	Skin	1
41	Stomach	1
51	Palate	1
76	Stomach	1
127	Neck	1
225	General	1
		9

Downer Avenue

59	Rectum	1

Downer Court

4	Liver	1

Downing Street

9	Eye	1

Dracut Street

12	Stomach	1
24	Vulva	1
58	Intestines	1
65	Liver	1
		4

Draper Street

130	Larynx	1
147	Lungs	1
148	General	1
150	Lungs	1
		4

Dresser Street

115	General	1

Dromey Street

16	Bone	1

Dudley Avenue

166	Breast	1

Dudley Street

11	Lungs	1
38	Stomach	1
59	Rectum	1
65	Breast	1
193	Stomach	1
196	Intestines	1
206	Larynx	1
221	Stomach	1
224	Stomach	1
225	Uterus	1
234	Breast	1
276	Uterus	1
277	Intestines	1
280	Breast	1
292	Larynx	1
303	Stomach	1
320	Oesophagus	1
366	Ear	1
374	Uterus	1
383	Intestines	1
398	Peritoneum	1
424	Prostate	1
424	Stomach	1
429	Oesophagus	1
436	Stomach	1
440	Rectum	1
487	Stomach	1
573	Bladder	1
591	Breast	1
618	Intestines	1
620	Bladder	1
677	Intestines	1
713	Prostate	1
785	Rectum	1
		34

By Streets and Houses—Continued

Dundee Street

5	Bone	1
30	Uterus	1
37	Uterus	1
67	Uterus	1
67	Breast	1
		5

Dunneath Street

1	Pancreas	1

Dunster Road

54	Intestines	1

Durham Street

4	Breast	1
5	Uterus	1
11	Larynx	1
16	Bladder	1
		4

Dustin Street

42	Stomach	1
109	Stomach	1
		2

Dwight Street

48	Neck	1

E Street

159	Stomach	1
233	Intestines	1
265	Uterus	1
268	Liver	1
283	Stomach	1
286	Neck	1
366	Penis	1
		7

East Street

36	Stomach	1
47	Intestines	1
50	Liver	1
		3

East Broadway

511	Breast	1
524	Lip	1
582	Stomach	1
610	Uterus	1
707	Bone	1
770	Face	1
797	Intestines	1
813	Breast	1
865	Stomach	1
899	Stomach	1
		10

East Brookline Street

24	Pancreas	1
30	Stomach	1
36	Heart	1
41	Liver	1
41	Lungs	1
41	Rectum	1
44	Uterus	1
79	Intestines	1
		8

East Canton Street

20	Intestines	1
23	Lungs	1
27	Stomach	1
27	Stomach	1
33	Stomach	1
35	Stomach	1
73	Ear	1
76	Oesophagus	1
84	Rectum	1
89	Throat	1
96	Larynx	1
109	Intestines	1
		12

East Concord Street

43	Intestines	1
82	Oesophagus	1
		2

East Cottage Street

15	Rectum	1
41	Bladder	1
50	Oesophagus	1
54	Neck	1
86	Uterus	1
266	Rectum	1
274	Intestines	1
		7

East Dedham Street

38	Bladder	1

East Eagle Street

216	Intestines	1
262	Bladder	1
		2

East Lenox Street

20	Uterus	1
86	Rectum	1
		2

East Milton Street

233	Pancreas	1

East Newton Street

27	Bladder	1
47	Rectum	1
49	Stomach	1
92	Uterus	1
98	Stomach	1
103	Neck	1
		6

East River Street

1138	Intestines	1

East Springfield Street

22	Liver	1
28	Uterus	1
40	Stomach	1
55	Stomach	1
		4

Easton Street

20	Vagina	1
24	Liver	1
63	Uterus	1
		3

Eaton Street

14	Intestines	1

Eden Street

10	Intestines	1
11	Stomach	1
15	Breast	1
		3

Edgemont Street

19	Stomach	1

Edison Greene

18	Skin	1

Ellson Street

16	Rectum	1

Edwin Street

69	Tongue	1

By Streets and Houses—Continued

Egleston Street

14	Intestines	1
14	Rectum	1
		2

Eldon Street

39	Rectum	1

Elery Street

13	Lung	1

Eliot Street

23	Stomach	1
52	Liver	1
174	Oesophagus	1
		3

Ellery Street

3½	Peritoneum	1

Ellet Street

24	Intestines	1

Ellington Street

129	Liver	1

Ellingwood Street

75	Stomach	1

Ellis Street

9	Lungs	1

Ellwood Street

5	Breast	1

Elm Street

16	Prostate	1
28	Stomach	1
59	Bone	1
67	Liver	1
112	Liver	1
		5

Elmdale Circle

15	Liver	1

Elm Hill Avenue

62	Ovary	1

Elm Hill Place

6	Bladder	1

Elmhurst Street

11	Rectum	1
12	Intestines	1
		2

Elm Lawn

11	Pancreas	1

Elmo Street

118	Pancreas	1

Elmont Street

24	Face	1
24	Stomach	1
24	Stomach	1
28	Kidney	1
		4

Elmore Street

12	Liver	1
33	Stomach	1
35	Stomach	1
		3

Elmwood Court

1	Rectum	1

Elmwood Street

10	Stomach	1
10	Face	1
30	Rectum	1
		3

Elton Street

18	Neck	1
20	Nose	1
		2

Emerald Street

3	Neck	1
11	Breast	1
27	Peritoneum	1
27	Jaw	1
		4

Emerson Street

34	Breast	1
43	Stomach	1
83	Bladder	1
108	Liver	1
176	Liver	1
241	Stomach	1
272	Liver	1
		7

Embankment Road

20	Uterus	1

Emmons Road

44	Uterus	1

Empire Street

22	Bone	1
77	Intestines	1
		2

Endicott Street

98	Breast	1
145	Stomach	1
166	Stomach	1
		3

Englewood Street

23	Stomach	1
77	Intestines	1
		2

Esmond Street

76	Stomach	1

Essex Street

10	Breast	1

Euclid Street

5	Uterus	1
9	Uterus	1
		2

Eustis Street

81	Tonsils	1
83	Rectum	1
188	Ovary	1
299	Intestines	1
		4

Euston Park

8	Bladder	1

Eutaw Place

2	Face	1

Eutaw Street

81	Stomach	1
83	Stomach	1
92	Bladder	1
121	Pancreas	1
108	Ovary	1
		5

Evans Street

92	Uterus	1
116	Intestines	1
118	Breast	1
		3

By Streets and Houses—Continued

Evans Way

22	Rectum	1

Evelyn Street

31	Stomach	1

Everdean Street

82	Liver	1

Everett Avenue

3	Breast	1
24	Uterus	1
		2

Everett Court

3	Intestines	1

Everett Square

2	Intestines	1

Everett Street

2	Breast	1
6	Stomach	1
15	Bladder	1
25	Jaw	1
41	Ovary	1
45	Stomach	1
165	Others	1
176	Intestines	1
189	Peritoneum	1
		9

Exeter Street Cor. Boylston (Hotel Lenox)

	Kidney	1

F Street

52	Larynx	1
175	Uterus	1
	Oesophagus	1
		3

Fabin Street

25	Stomach	1

Fabyan Street

17	Stomach	1

Factory Street

10	Uterus	1

Fairbanks Street

56	Intestines	1
64	Uterus	1
		2

Fairbury Street

10	Palate	1
18	Stomach	1
		2

Fairland Street

14	Liver	1

Fairmount Street

58	Ovary	1
280	Stomach	1
		2

Fairview Avenue

7	Oesophagus	1
40	Breast	1
		2

Falcon Street

29	Stomach	1
31	Liver	1
32	Liver	1
35	Uterus	1
60	Liver	1
87	Rectum	1
128	Lungs	1
134	Uterus	1
137	Stomach	1
140	Uterus	1
203	Bladder	1
		11

Falmouth Street

52	Stomach	1

Faneuil Chambers

3	Face	1
3	Stomach	1
		2

Faneuil Street

310	Oesophagus	1
340	Rectum	1
355	Pancreas	1
		3

Farragut Road

63	Stomach	1
83	Intestines	1
109	Kidney	1
		3

Fay Street

51	Liver	1

Fayston Street

6	Liver	1
25	Stomach	1
80	Intestines	1
83	Liver	1
		4

Fellows Court

19	Uterus	1

Fellows Place

6	Lip	1
6	Stomach	1
		2

Fellows Street

46	Breast	1

Fenway

34	Intestines	1
58	Bladder	1
114	Pancreas	1
208	Oesophagus	1
		4

Fenwood Road

19	Uterus	1
53	Ovary	1
58	Prostate	1
		3

Fernboro Street

24	Stomach	1
28	Lung	1
		2

Ferrin Street

10	Stomach	1

Field Street

39	Stomach	1
60	Oesophagus	1
		2

Fielding Place

4	Stomach	1

Flagg Street

10	Intestines	1
32	Intestines	1
		2

Fleet Street

16	General	1

By Streets and Houses—Continued

Fletcher Street

59	Stomach	1
59	Bladder	1
102	Uterus	1
		3

Florence Street

1	Stomach	1
18	General	1
27	Bone	1
37	Bladder	1
105	Stomach	1
205	Uterus	1
		6

Florida Street

115	Stomach	1

Floyd Street

50	Rectum	1

Folsom Street

26	Bladder	1
39	Breast	1
98	Stomach	1
		3

Forbes Street

19	Liver	1
37	Breast	1
50	Rectum	1
80	Testes	1
		4

Ford Street

21	Intestines	1

Fordham Street

3	Face	1

Forest Street

53	Bone	1
55	Liver	1
55	Stomach	1
		3

Forest Hills Street

24	Jaw	1

Fort Avenue

6	Uterus	1
8	Uterus	1
41	Face	1
89	Liver	1
		4

Foster Street

12	Liver	1
96	Breast	1
280	Rectum	1
		3

Fottler Road

25	Stomach	1
50	Liver	1
		2

Fountain Square

3	Intestines	1

Fowler Street

40	Stomach	1
49	Intestines	1
		2

Frances Street

20	Intestines	1
38	Rectum	1
		2

Franconia Street

5	Liver	1

Frankfort Street

18	Stomach	1
76	Bone	1
		2

Franklin Street

2	Breast	1
14	Stomach	1
96	Jaw	1
127	Stomach	1
135	Liver	1
137	Ear	1
		6

Frederick Terrace

3	Stomach	1
4	Intestines	1
		2

Freeman Street

19	Uterus	1

Freeport Street

616	Neck	1

Friend Street

50	Jaw	1

Frothingham Street

24	Liver	1

Fuller Street

21	Oesophagus	1

Fulton Street

2	Uterus	1

G Street

5	Brain	1
35	Liver	1
35	Intestines	1
50	Liver	1
68	Intestines	1
		5

Gainsboro Street

98	Uterus	1
101	Liver	1
101	Liver	1
105	Intestines	1
111	Stomach	1
		5

Gannett Street (Rox.)

16	Stomach	1

Galena Street

15	Uterus	1

Garden Court

9	Breast	1

Garden Street

41	Prostate	1
53	General	1
53	Liver	1
		3

Gardner Street

24	Stomach	1
35	Lungs	1
45	Breast	1
60	Stomach	1
72	Breast	1
217	Breast	1
		6

Garfield Avenue

37	Stomach	1

Garland Street

2	Intestines	1

Garrison Hall

16	Uterus	1
19	Stomach	1
		2

By Streets and Houses—Continued

Gaston Street
9 Liver 1

Gates Street
13 Pancreas 1
76 Liver 1
2

Gayland Street
20 Uterus 1

Gaylord Street
3 Rectum 1
28 Lungs 1
2

General Avenue
100 Liver 1
104 Lungs 1
378 Intestines 1
417 Uterus 1
421 Stomach 1
5

George Street
140 Uterus 1

Gladstone Street
81 Liver 1

Gleason Street
40 Lungs 1

Glencoe Street
17 Stomach 1

Glendale Street
16 Bones 1
29 Intestines 1
72 Testes 1
74 Ovary 1
91 Liver 1
5

Glenville Avenue
18 Liver 1
27 Stomach 1
39 Ovary 1
126 Liver 1
185 Liver 1
5

Glenwood Street
10 Liver 1
17a Stomach 1
87 Jaw 1
96 Stomach 1
4

Glenwood Terrace
1 Stomach 1

Gloucester Place
9 Stomach 1

Glover Street
1 General 1

Gold Street
88 Stomach 1
128 Lungs 1
2

Goldsmith Street
15 Rectum 1

Gordon Street
6 Uterus 1
18 Uterus 1
2

Gove Street
164 Uterus 1

Grafton Street
4 Tongue 1
20 Stomach 1
2

Grampion Way
60 Oesophagus 1
72 Stomach 1
2

Granger Street
38 General 1
60 Breast 1
70 Neck 1
3

Granite Avenue
84 Breast 1

Grant Place
15 Rectum 1

Grant's Court
1 Breast 1

Granville Street
27 Rectum 1

Gray Street
17 Stomach 1
31 Liver 1
35 Rectum 1
46 Uterus 1
47 Intestines 1
50 Intestines 1
56 Kidneys 1
57 Stomach 1
57 Oesophagus 1
9

Green Street
23 Bladder 1
23 Stomach 1
29 Liver 1
36 Stomach 1
42 Liver 1
50 Uterus 1
56 Rectum 1
57 Pancreas 1
57 Oesophagus 1
57 Stomach 1
63a Liver 1
86 Larynx 1
196 Bladder 1
206 Stomach 1
14

Greenbrier Street
15 Uterus 1
46 Rectum 1
114 Rectum 1
3

Greenbay Street
36 Face 1
36 Stomach 1
2

Greenock Street
41 Stomach 1

Greenough Avenue
6 Bladder 1
26 Prostate 1
2

Greenwood Street
11 Stomach 1
22 Breast 1
2

By Streets and Houses—Continued

Greenwich Street

14	Stomach	1
16	Uterus	1
52	Jaw	1
		3

Grimes Street

12	Breast	1
14	Liver	1
		2

Groton Street

16	Intestines	1

Grouse Street

6	Breast	1

Grove Street

16	Stomach	1
28	Uterus	1
37	Prostate	1
43	Breast	1
166	Rectum	1
		5

H Street

39	Rectum	1
111	Neck	1
111	Neck	1
111	Stomach	1
		4

Halford Road

22	Breasts	1

Hall Street

24	Breast	1

Hamilton Street

73	Jaw	1
126	Intestines	1
134	Stomach	1
188	Larynx	1
204	Intestines	1
205	Intestines	1
228	Uterus	1
		7

Hammond Street

24	Mouth	1
24	Rectum	1
49	Stomach	1
49	Stomach	1
94	Uterus	1
		5

Hamlet Street

15	Intestines	1

Hampden Street

51	Uterus	1
93a	Stomach	1
110	Rectum	1
119	Uterus	1
171	Eye	1
199	Stomach	1
		6

Hampshire Center

2	Intestines	1

Hampshire Street

119	Uterus	1

Hancock Street

10	Bones	1
11	Liver	1
12	Bones	1
17	Larynx	1
18	Oesophagus	1
25	Stomach	1
28	Intestines	1
32	Intestines	1
41	Oesophagus	1
53	Stomach	1
62	Tongue	1
71	Skin	1
76	Stomach	1
128	Bladder	1
		14

Hanover Street

181	Intestines	1
215	Larynx	1
304	Pancreas	1
327	Stomach	1
350	Liver	1
382	Oesophagus	1
400	Stomach	1
430	Liver	1
460	Uterus	1
479	Stomach	1
		10

Hansborough Street

19	Liver	1
35	Intestines	1
		2

Hansen Street

9	Liver	1
47	Throat	1
		2

Harbor View Street

38	Rectum	1
38	Intestines	1
		2

Harley Street

26	Jaw	1

Harold Street

23	Intestines	1
33	Bladder	1
143	Pleura	1
148	Lungs	1
160	Stomach	1
		5

Harris Avenue

9	Kidney	1
28	Breast	1
		2

Harrishof Street

89	Peritoneum	1
100	Larynx	1
117	Mesent. and per.	1
		3

Hano Street

53	Intestines	1

Harrison Avenue

78	Liver	1
79	Gall bladder	1
88	Liver	1
140	Tongue	1
187	Prostate	1
196	Intestines	1
215	Breast	1
217	Penis	1
224	Uterus	1
299	Intestines	1
342	Stomach	1
346	Neck	1
411	Uterus	1
414	Stomach	1
488	Intestines	1
549	Prostate	1
788	Stomach	1
878	Kidney	1
818	Rectum	1
879	Uterus	1

By Streets and Houses—Continued

Harrison Ave.—Continued

907	Bones	1
976	Pancreas	1
927	Liver	1
997	Rectum	1
1007	Breast	1
		25

Harrison Park

3	Intestines	1

Hartford Street

11	Intestines	1

Hartland Street

9	Liver	1
17	Uterus	1
		2

Hartwell Street

42	Pancreas	1

Harvard Street

24	Stomach	1
38	Stomach	1
40	Vulva	1
60	Stomach	1
		4

Harvard Avenue

9	Breast	1
21	Rectum	1
32	Prostate	1
57	Gall bladder	1
85	Stomach	1
85	Liver	1
95	Breast	1
149	Throat	1
223	Uterus	1
239	Liver	1
		10

Harvard Street—(Dorchester)

520	Rectum	1

Harvard Park

9	Uterus	1

Harvard Square

9	Liver	1

Harvard Terrace—(Brighton)

16	Stomach	1

(Allston)

17	Uterus	1
		2

Harvest Street

12	Peritoneum	1
40	Throat	1
		2

Harvest Terrace (Dorchester)

1	Breast	1

Harwood Street (Dorchester)

28	Liver	1
42	Liver	1
		2

Haskins Street

15	Intestines	1
23	Liver	1
35	Oesophagus	1
		3

Hastings Street

50	Prostate	1
55	Intestines	1
84	Stomach	1
		3

Hatch Street

10	Prostate	1

Hathon Street

3	Uterus	1

Havelock Street

8	Rectum	1

Haverford Street

8	Liver	1
21	Liver	1
		2

Haverhill Street

46	Tongue	1
375	Lips	1
		2

Haviland Street

18	Breasts	1

Havre Street

9	Oesophagus	1
53	Oesophagus	1
63	Tongue	1
131	Oesophagus	1
152	Larynx	1
159	Lungs	1
236	Stomach	1
243	Breast	1
246	Bladder	1
278	Lungs	1
289	Uterus	1
		11

Hawthorn Street

2	Breast	1
24	Stomach	1
30	Liver	1
		3

Hayden Street

33	Stomach	1

Hayes Street

7	Liver	1

Haynes Park

1a	Uterus	1

Haynes Street

13	Intestines	1
47	Neck	1
		2

Hazelwood Street

11	Stomach	1
11	Liver	1
		2

Heath Avenue

31	Intestines	1

Heath Street

55	Breast	1
83	Larynx	1
111	Liver	1
179a	Liver	1
204	Liver	1
275	Intestines	1
275	Intestines	1
		7

Hebron Street

261	Stomach	1

By Streets and Houses—Continued

Hecla Street

19	Prostate	1
38	Uterus	1
49	Rectum	1
		3

Hefferan Street

9	Rectum	1

Helene Road

12	Stomach	1

Hemenway Street

17	Breast	1
26	Liver	1
26	Breast	1
136	Vagina	1
148	Intestines	1
175	Intestines	1
238	Uterus	1
		7

Henchman Street

20	Stomach	1

Hendry Street

23	Uterus	1
37	Stomach	1
37	Intestines	1
		3

Henley Street

52	H. palate	1

Hemman Street

70	Uterus	1

Herman Street

9	Stomach	1
17	Face	1
		2

Hewins Street

27	Lungs	1

Hewlett Street

22	Throat	1
87	Stomach	1
		2

Hiawatha Road

50	Intestines	1

Hichborn Street

40	Uterus	1
78	Uterus	1
		2

High Road

27	Stomach	1
43	Stomach	1
52	Stomach	1
66	Uterus	1
75½	Liver	1
95	Rectum	1
109	Bladder	1
134	Neck	1
148	Stomach	1
		9

Highgate Street

17	Rectum	1

Highland Park

4½	Intestines	1

Highland Street

16	Liver and g. b.	1
20	Pancreas	1
24	Liver	1
140	Stomach	1
159	Intestines	1
163	Pancreas	1
175	Intestines	1
177	Neck	1
196	Stomach	1
285	Prostate	1
291	Throat	1
296	Rectum	1
326	Ovary	1
		13

High Rock

7	Bladder	1

Hill Street

5	Stomach	1

Hillside Street

63	Intestines	1
70	Stomach	1
148	Liver	1
		3

Hinckley Street

15	Uterus	1

Hobson Street

11	Stomach	1
11	Others	1
17	Uterus	1
17	Uterus	1
24	Liver	1
		5

Holborn Street

8	Stomach	1
9	Breast	1
40	Stomach	1
		3

Holbrook Street

14	Breast	1
18	Intestines	1
23	Rectum	1
24	Intestines	1
		4

Holden Row

7	Stomach	1

Holiday Street

13	Intestines	1

Hollingsworth Street

80	Intestines	1
129	Testes	1
		2

Hollander Street

27	Breast	1
47	Stomach	1
		2

Hollock Street

81	Uterus	1

Holman Street

9	Intestines	1

Holmes Street

58	Stomach	1

Holmfield Street

10	Pancreas	1
12	General	1
		2

Holworthy Street

51	Breast	1

Holyoke Street

17	Stomach	1

Homes Avenue

5	Prostate	1

By Streets and Houses—Continued

Homer Street

63	Stomach	1
67	Stomach	1
		2

Homestead Street

9	Intestines	1
24	Intestines	1
27	Rectum	1
753	Prostate	1
35	Intestines	1
53	Prostate	1
141	Stomach	1
		7

Hopedale Street

42	Intestines	1
46	Stomach	1
		2

Hopkins Street

5	Stomach	1
27	Breast	1
43	Bladder	1
		3

Horace Street

91	Intestines	1

Hosmer Street

7	Kidney	1

Houghton Street

27	Breast	1

Houston Street

6	Peritoneum	1

Howard Avenue

9	Lungs	1
58	Bones	1
83	Intestines	1
104	Stomach	1
117	Uterus	1
124	Stomach	1
143	Uterus	1
168	Stomach	1
		8

Howe Street

38	Prostate	1

Howell Street

8	Stomach	1
21	Stomach	1
22	Stomach	1
27	Stomach	1
28	Oesophagus	1
		5

Howland Street

86	Stomach	1
106	Intestines	1
119	Stomach	1
120	Stomach	1
125	Oesophagus	1
125	Stomach	1
125	Prostate	1
		7

Hubbard Street

25	Stomach	1

Hubert Street

6	Breast	1

Hudson Street

10	Intestines	1
12	Stomach	1
16	Bladder	1
32	Prostate	1
45	Liver	1
48	Stomach	1
134	Oesophagus	1
		7

Hull Street

7	Stomach	1

Humboldt Avenue

11	Stomach	1
32a	Stomach	1
69	Tongue	1
69	Intestines	1
82	Stomach	1
121	Kidney	1
224	Liver	1
		7

Humphreys Street

18	Stomach	1
20	Stomach	1
35	Breast	1
		3

Hunnewell Avenue

15	Lungs	1

Hunter Street

7	Stomach	1

Huntington Avenue

18	Breast	1
78	Tongue	1
98	Stomach	1
98	Breast	1
110	Liver	1
120	Intestines	1
124	Liver	1
128	Ovary	1
176	Stomach	1
203	Lungs	1
207	Breast	1
208	Intestines	1
214	Rectum	1
215	Breast	1
352	Liver	1
376	Stomach	1
460	Larynx	1
479	Intestines	1
588	Uterus	1
652	Stomach	1
714	Uterus	1
*738	Uterus	1
841	Breast	1
841	Bone	1
841	Breast	1
841	Breast	1
872	Intestines	1
884	Stomach	1
886	Rectum	1
		29

*House of the Good Shepherd

Hutchins Street

42	Ovary	1
80	Stomach	1
		2

Hyde Park Avenue

10	Intestines	1
57	Stomach	1
64	Intestines	1
80	Bones	1
102	Peritoneum	1
299	Tongue	1
311	Uterus	1
568	Prostate	1
1040	Ears	1
1128	Lips	1
1128	Ovary	1
1164	Prostate	1
		12

By Streets and Houses—Continued

I Street

10	Neck	1
40	Stomach	1
187	Bladder	1
		3

Idaho Street

62	Throat	1
67	Uterus	1
		2

Idlewild Street

20	Stomach	1

Indiana Avenue

143	Intestines	1

Ingleside Street

8	Rectum	1
9	Stomach	1
13	Uterus	1
		3

Intervale Street

5	Uterus	1
27	Intestines	1
42	Liver	1
74	Breast	1
91	Stomach	1
103	Bladder	1
126	Kidney	1
		7

Indwood Street

5	Rectum	1

Iowa Street

11	Neck	1

Ipswich Street

30	Bladder	1

Irma Street

7	Uterus	1

Irwin Avenue

3	Stomach	1
8	Rectum	1
14	Oesophagus	1
		3

Irving Street

33	Liver	1

Irvington Street

5	Breast	1
	Oesophagus	1
		2

Ivanhoe Street

30	Larynx	1

Ivory Street

25	Stomach	1

Jackson Place

5	Intestines	1

Jamaica Street

58	Face	1

James Street

12	Uterus	1
14	Intestines	1
15	Uterus	1
17	Bladder	1
		4

Jay Street

1	Stomach	1
3	Jaw	1
		2

Jefferson Street

15	Breast	1

Jeffries Street

8	Stomach	1

Jess Street

3	Intestines	1

Johnston Road

10	Rectum	1
26	Testes	1
31	Intestines	1
		3

Johnston Street

55	Stomach	1

Joiner Street

4	Breast	1
8	Rectum	1
11	Stomach	1
		3

Josephine Street

15	Breast	1
22	Uterus	1
		2

Joy Street

	Neck	1
37	Stomach	1
47	Stomach	1
		3

Judson Street

13	Stomach	1
24	Uterus	1
		2

Julian Street

1	Uterus	1
24	Prostate	1
24	Breast	1
52	Intestines	1
		4

Juniper Street

5	Uterus	1

K Street

137	Jaw	1
146	Liver	1
180	Uterus	1
269	Liver	1
281	Larynx	1
287	Pleura	1
349	Bone	1
364	Stomach	1
379	Breast	1
384	Intestines	1
389	Breast	1
399	Tonsil	1
		12

Kane Street

2	Stomach	1

Kearsage Street

3	Breast	1

Kemble Street

3	Uterus	1

Kempton Street

25	Stomach	1
32	Stomach	1
44	Stomach	1
		3

By Streets and Houses—Continued

Kendall Street

6	Stomach	1
41	Bladder	1
56	Bones	1
61	Ovary	1
72	Stomach	1
		5

Kenrick Street

14	Liver	1

Kensington Street

13	Liver	1
17	Neck	1
		2

Kent Street

12	Gall bladder	1
32	Stomach	1
35	Jaw	1
		3

Kenton Road

63	Stomach	1
64	Breast	1
		2

Kenwood Street

17	Oesophagus	1
38	Bladder	1
62	Prostate	1
		3

Keswick Street

6	Others	1
16	Intestines	1
		2

Kimball Street

23	Uterus	1
28	Face	1
		2

King Street

45	Breast	1
51	Intestines	1
119	Liver	1
128	Intestines	1
		4

King Terrace

9	Pancreas	1

Kingsdale Street

81	Stomach	1

Kitredge Street

106	Tongue	1
188	Stomach	1
		2

Kneeland Street

100	Stomach	1

Knight Court

1	Uterus	1

Lyman Street

2	Jaw	1
17	Liver	1
		2

L Street

158	Bone	1
225	Intestines	1
700	Stomach	1
		3

Laconia Street

9	Stomach	1

Lafield Street

22	Intestines	1

Lake Street (Cenacle Convent)

	Bone	1
16	Uterus	1
70	Bone	1
222	Uterus	1
		4

Lamartine Street

3	Jaw	1
17	Uterus	1
103a	Liver	1
140	Jaw	1
146	Breast	1
160	Stomach	1
186	Uterus	1
200	Neck	1
212	Bladder	1
300	Ovary	1
302	Bladder	1
		11

Lambert Street

21	Stomach	1
31	Prostate	1
34	Liver	1
		3

Lamont Street

38	Rectum	1

Langdon Street

2	Intestines	1
4	Stomach	1
8	Stomach	1
11	Intestines	1
36	Lung	1
52	Oesophagus	1
		6

Lansing Street

3	General	1

Larch Place

1	Liver	1

Larchmont Street

19	Uterus	1
6	Ovary	1
		2

Lanark Road

101	Bladder	1

Laurel Street

31	Uterus	1
48	Intestines	1
		2

Lawn Street

49	Oesophagus	1
66	Throat	1
		2

Lawrence Street

20	Stomach	1
20	Intestines	1
24	Bladder	1
25	Uterus	1
34	Stomach	1
49	Uterus	1
		6

Lawrence Avenue

79	Bone	1

Lee Street

19	Liver	1

Leedsville Street

10	Throat	1

Leicester Street

35	Lungs	1

By Streets and Houses—Continued

Lenox Street

63	Uterus	1

Leon Street

7	Stomach	1
24	Face	1
33	Uterus	1
39	Liver	1
		4

Leonard Street

38	Uterus	1

Leonsdale Street

46	Kidney	1

Leroy Street

9	Intestines	1
24	Liver	1
27	Liver	1
		3

Leslie Street

8	Kidney	1
12	Breast	1
		2

Letterfine Street

4	Liver	1

Levant Street

2	Gall bladder	1

Leverett Street

58	Stomach	1
76	Oesophagus	1
87	Lungs	1
98	Stomach	1
101	Intestines	1
103	Bone	1
122½	Liver	1
		7

Lexington Street

7	Intestines	1
28	Brain	1
43	Intestines	1
47	Lip	1
118	Breast	1
193	Liver	1
203	Intestines	1
204	Uterus	1
217	Stomach	1
287	Stomach	1
		10

Lexington Avenue

8	Stomach	1

Leydon Street

71	Breast	1
115	Stomach	1
		2

Leyland Street

8	Breast	1
16	Intestines	1
27	Breast	1
		3

Liberty Street

9	Oesophagus	1

Lincoln Street

14	Stomach	1
21	Uterus	1
21	Stomach	1
23	Liver	1
29	Face	1
216	Stomach	1
		6

Linden Park Street

1	Prostate	1

Linden Place

1	Stomach	1

Linden Street—(Dorchester)

4	Intestines	1
10	Intestines	1
41	Stomach	1
49	Breast	1
		4

Linden Street—(Bri.)

11a	Stomach	1
81	Jaw	1
84	Breast	1
87	Bone	1
		4

Lindsey Street

50	Neck	1
54	Uterus	1
		2

Linnet Street

31	Liver	1

Linwood Park

1	Intestines	1
6	Breast	1
		2

Linwood Street

19	Oesophagus	1
46	Breast	1
	Breast	1
		3

Lithgow Street

52	Rectum	1

London Street

75	Intestines	1
76	Bladder	1
146	Breast	1
157	Face	1
183	Tongue	1
		5

Long Avenue

46	Breast	1

Longmeadow Street

16	Face	1

Longwood Avenue

30	Uterus	1
123	Oesophagus	1
245	Rectum	1
257	Intestines	1
		4

Lonsdale Road

45	Stomach	1
62	Intestines	1
107	Breast	1
121	Intestines	1
		4

Loring Street

11	Liver	1
55	Breast	1
59	Oesophagus	1
		3

Loretta Street

8	Stomach	1

Lorna Street

55	Stomach	1

By Streets and Houses—Continued

Lorne Street

42	Liver	1
59	Stomach	1
		2

Lorraine Terrace

10	Uterus	1

Lorraine Street

32	Stomach	1
36	Prostate	1
		2

Lothrop Road

4	Stomach	1

Louis Prang Street

8	Uterus	1
65	Bladder	1
		2

Lowell Street

16	Stomach	1
30	Breast	1
59	Throat	1
		3

Lubec Street

9	Liver	1

Lucerne Street

53	Prostate	1
65	Lung	1
85	Stomach	1
		3

Lyman Street

2	Jaw	1
17	Liver	1
		2

Lyman Terrace

8	Intestines	1

Lynde Street

18	Larynx	1
33	Uterus	1
		2

Lyndhurst Street

65	Prostate	1
66	Gall bladder	1
		2

Lynville Terrace

2	Uterus	1

Lyon Street

5	Uterus	1

M Street

87	Intestines	1
119	Kidney	1
150a	Brain	1
155	Oesophagus	1
		4

Madison Street

17	Stomach	1
30	Uterus	1
		2

Magazine Street

46	Oesophagus	1
61	Jaw	1
		2

Magdalen Street

6	Jaw	1
40	Lung	1
		2

Magnolia Street

12	Ovary	1
15	Intestines	1
15	Breast	1
15	Intestines	1
15	Lungs	1
21	Pancreas	1
23	Stomach	1
32	Bladder	1
88	Ovary	1
90	Stomach	1
106	Breast	1
112	Uterus	1
246	Kidney	1
		13

Main Street

20	Uterus	1
116	Oesophagus	1
379	Intestines	1
421	Oesophagus	1
426	Uterus	1
477	Uterus	1
464	Rectum	1
510	Jaw	1
		8

Maitland Street

1	Stomach	1
8	Stomach	1
		2

Malden Street

9	Liver	1
120	Stomach	1
		2

Mall Street

30	Breast	1
31	Uterus	1
48	Intestines	1
		3

Mallon Park

34	Intestines	1

Malone Street

7	Intestines	1

Malvern Street

11	Bone	1

Mansfield Place

2	Breast	1

Mansfield Street

6	Pancreas	1
6	Breast	1
		2

Manthorn Road

48	Stomach	1
48	Uterus	1
99	Intestines	1
100	Stomach	1
124	Intestines	1
		5

Maple Street

38	Rectum	1
43	Stomach	1
52	Intestines	1
91	Pancreas	1
97	Pancreas	1
201	Pancreas	1
		6

Mapleton Street

32	Bone	1

By Streets and Houses—Continued

Marcella Street

16	Stomach	1
20	Intestines	1
32	Lungs	1
97	Stomach	1
101	Skin	1
		5

Marine Road

106	Brain	1

Marion Street

13	Stomach	1
15	Stomach	1
21	Intestines	1
41	Rectum	1
		4

Market Street

257	Larynx	1

Marlboro Street

108	Stomach	1
115	Liver	1
170	Kidney	1
176	Breast	1
219	Bladder	1
338	Oesophagus	1
380	Liver	1
392	Bladder	1
405	Rectum	1
426	Intestines	1
572	Uterus	1
		11

Marshall Place

7	Stomach	1

Marshfield Street

7	Stomach	1
29	Vagina	1
34	Stomach	1
		3

Martin Street

85	Stomach	1

Maryland Street

4	Bladder	1
12	Uterus	1
		2

Mascot Street

69	Oesophagus	1

Mason Street

6	Stomach	1

Massachusetts Avenue

9	Breast	1
49	Rectum	1
143	Stomach	1
146	*Intestines	1
146	*Intestines	1
146	Uterus	1
155	Liver	1
195	Uterus	1
206	Ovary	1
254	Breast	1
351	Intestines	1
358	Intestines	1
366	General	1
394	Rectum	1
429	Stomach	1
462	Stomach	1
482	Bladder	1
531	Stomach	1
539	Throat	1
540	Stomach	1
540	Intestines	1
556	Stomach	1
570	Breast	1
572	Rectum	1
578	Intestines	1
582	Uterus	1
586	Prostate	1
603	Stomach	1
621	Breast	1
684	Oesophagus	1
687	Liver	1
693	Uterus	1
716	Uterus	1
933	Intestines	1
1275	Intestines	1
1280	Uterus	1
		36

*Massachusetts Chambers

Mather Street

8	Stomach	1
55	Breast	1
		2

Maverick Street

47	Intestines	1
49	Intestines	1
53	Stomach	1
91	Penis	1
127	Liver	1
		5

Mayfield Street

19	Brain	1

Mayo Street

21	Uterus	1
29	Heart	1
		2

Maywood Street

11	Stomach	1
15	Stomach	1
28	Kidney	1
47	Intestines	1
68	Oesophagus	1
		5

Mazing Street

30	Throat	1

McLean Street

12	Prostate	1

McLellan Street

19	Liver	1
36	Stomach	1
43	Stomach	1
		3

Mead Street

20	Rectum	1
31	Liver	1
		2

Meander Street

13	Intestines	1

Mechanic Street

20	Oesophagus	1

Medford Street

12	Stomach	1
86	Stomach	1
100	Liver	1
584	Lip	1
		4

Melbourne Street

11	Oesophagus	1
12	Stomach	1
20	Tongue	1
		3

By Streets and Houses—Continued

Melrose Street

6	Oesophagus	1
62	Stomach	1
		2

Melville Avenue

4	Tongue	1
103	Vagina	1
		2

Mercer Street

22	Stomach	1
35	Stomach	1
43	Rectum	1
44	Larynx	1
45	Stomach	1
72	Prostate	1
		6

Meridian Street

49	Liver	1
106	Intestines	1
109	Oesophagus	1
244	Uterus	1
287	Breast	1
364	Stomach	1
365	Prostate	1
370	Stomach	1
379	Neck	1
385	Uterus	1
393	Oesophagus	1
396	Uterus	1
408	Intestines	1
416	Face	1
421	Stomach	1
428	Ovary	1
477	Bone	1
		17

Meridith Street

11	Breast	1

Merlin Street

13	Uterus	1

Metcalf Street

15	Uterus	1

Metropolitan Avenue

331	Stomach	1
694	Prostate	1
		2

Metropolitan Terrace

7	Breast	1

Michaelangelo Street

4	Stomach	1

Michigan Street

3	Breast	1

Middle Street

80	Stomach	1

Middlesex Street

13	Stomach	1
13	Liver	1
33	Stomach	1
47	Breast	1
60	Larynx	1
72	Uterus	1
73	Stomach	1
73	Intestines	1
76	Intestines	1
		9

Middleton Street

20	Peritoneum	1

Midland Street

26	Breast	1

Milford Street

1	Stomach	1
10	Oesophagus	1
11	Rectum	1
38	Intestines	1
		4

Mill Street

28	Stomach	1

Millers Lane

21	Liver	1

Miller Park

1	Breast	1

Millet Street

65	Liver	1
97	Bone	1
		2

Mills Street

12	Uterus	1

Milton Avenue

22	Uterus	1
92	Bone	1
94	Oesophagus	1
		3

Milton Street

79	Bone	1
115	Liver	1
236	Liver	1
		3

Milton Road

17	Intestines	1

Minot Street

1	General	1
6	Stomach	1
55	Intestines	1
148	Kidney	1
		4

Minton Street

4	Breast	1

Mitchell Street

290	Prostate	1

Monadnock Street

3	Stomach	1
25	Bone	1
		2

Monmouth Street

8	Breast	1
40	Brain	1
		2

Monroe Street

66	Stomach	1
88	Rectum	1
		2

Montebello Road

28	Bone	1
70	Throat	1
		2

Montello Street

14	Rectum	1

Montfern Street

24	Ovary	1
36	Liver	1
54	Uterus	1
		3

Montgomery Street

44	Stomach	1

Montrose Street

4	Pancreas	1

By Streets and Houses—Continued

Montview Street
53 Liver 1

Monument Street
15 Liver 1

Monument Square
15 Stomach 1

Monument Avenue
22 Pancreas 1
48 Neck 1
56 Stomach 1
67 Uterus 1
4

Moore Street
35 Stomach 1
75 Neck 1
88 Liver 1
116 Stomach 1
4

Moraine Street
74 Intestines 1
75 Breast 1
2

Moreland Street
10 Breast 1
38 Neck 1
43 Uterus 1
103 Breast 1
114 Larynx 1
5

Morley Street
21 Stomach 1

Morrison Street
17 Breast 1

Morse Street
10 Liver 1

Morton Street
619 Breast 1
687 Intestines 1
736 Breast 1
750 Uterus 1
801 Pancreas 1
1196 Stomach 1
6

Moseley Street
14 Stomach 1
73 Oesophagus 1
2

Moulton Street
48 Neck 1

Mountfort Street
69 Pancreas 1
96 Breast 1
2

Moultrie Street
40 Uterus 1
47 Intestines 1
2

Mountain Avenue
62 General 1

Mozart Street
38 Liver 1
87 Stomach 1
89 Uterus 1
3

Mt. Fern Avenue
19 Liver 1

Mt. Hope Avenue
99 Testes 1

Mt. Ida Terrace
1 Rectum 1

Mt. Pleasant Avenue
4 Skin 1
9 Peritoneum 1
24 Liver 1
58 Larynx 1
90 Intestines 1
101 Rectum 1
114 Uterus 1
7

Mt. Vernon Street
3 Rectum 1
16 Uterus 1
24 Intestines 1
36 Intestines 1
39 Rectum 1
59 Kidney 1
65 Intestines 1
80 Stomach 1
87 Stomach 1
84 Uterus 1
87 Intestines 1
96 Bone 1
12

Mulvey Street
17 Oesophagus 1

Munroe Street
5 Brain 1

Murdock Street
41 Oesophagus 1
52 Bladder 1
2

Museum Road
10 Cheek 1
10 Uterus 1
2

Myrtle Street
6 Rectum 1
21 Uterus 1
26 Bladder 1
27 General 1
60 Liver 1
69 Liver 1
70 Uterus 1
71 Rectum 1
74 Brain 1
82 Rectum 1
99 Liver 1
127 Liver 1
12

Mystic Street
24 Gall bladder 1
46 Oesophagus 1
2

N Street
174½ Liver 1

National Street
10 Tongue 1

Nassau Street
9 Intestines 1

Nawn Street
1 Prostate 1

By Streets and Houses—Continued

Nazing Street

11	General	1
47	Tongue	1
		2

Nelson Street

11	Breast	1
38	Stomach	1
		2

Neponset Avenue

18	Liver	1
18	Intestines	1
59	Stomach	1
59	Lip	1
60	Oesophagus	1
67	Neck	1
285	Lung	1
372	Stomach	1
402	Stomach	1
		9

Neptune Road

62	Neck	1
14	Stomach	1
115	Intestines	1
		3

New Street

23	Mouth	1

Newark Street

6	Intestines	1

Newbern Street

31	General	1

Newbourne Street

14	Liver	1

Newburg Street

10	Prostate	1
13	Lung	1
95	Stomach	1
126	Intestines	1
		4

Newbury Street

	Liver	1
9	Uterus	1
14	Bone	1
20	Liver	1
121	Breast	1
123	Uterus	1
153	Stomach	1
156	Intestines	1
160	Oesophagus	1
234	Rectum	1
264	Stomach	1
267	Liver	1
296	Intestines	1
415	Rectum	1
418	Breast	1
		15

Newcomb Street

11	Pancreas	1
11	Intestines	1
24	Stomach	1
49	Uterus	1
		4

New England Avenue

1	Oesophagus	1

New Health Street

6	Jaw	1

Newland Street

23	Oesophagus	1

Newman Street

26	Liver	1
31	Stomach	1
		2

Newport Street

22	Stomach	1
30	Intestines	1
54	Uterus	1
		3

Newton Street

8	Breast	1

Nightengale Street

3	Uterus	1

Nixon Street

24	Stomach	1

Noanet Street

15	Oesophagus	1

Nonquit Street

12	Breast	1

Norfolk Street

31	Rectum	1
49	Stomach	1
74	Stomach	1
120	Breast	1
343	Ovary	1
389	Stomach	1
		6

Norfolk Avenue

166	Oesophagus	1

Norman Street

17	Stomach	1

Normandy Street

19	Stomach	1
21	Kidney	1
266	Stomach	1
		3

North Avenue

6	Intestines	1

North Street

27	Peritoneum	1
246	Neck	1
277	Pancreas	1
289	Stomach	1
309	Liver	1
		5

Northampton Street

34a	Uterus	1
175	Liver	1
381	Bladder	1
391	Uterus	1
394	Stomach	1
		5

Northern Avenue

375	Liver	1

North Anderson Street

4	Rectum	1

No. Beacon Street

160	Intestines	1
278	Vulva	1
		2

No. Bennett Street

34	Stomach	1

No. Grove Street

7	Intestines	1

No. Harvard Street

16	Liver	1
130	Breast	1
		2

By Streets and Houses—Continued

No. Margin Street
64 Rectum 1

No. Mead Street
19 Uterus 1

No. Monroe Street
28 Stomach 1

No. Russell Street
46 Bladder 1
72 Stomach 1
2

No. Rutland Square
84 Intestines 1

Northfield Street
37 Stomach 1
64 Breast 1
2

Norton Street (H. P.)
50 Stomach 1
59 Stomach 1
88 Prostate 1
3

Norway Street
24 Neck 1
35 Pharynx 1
49 Breast 1
51 Stomach 1
103 Uterus 1
5

Norwell Street
22 Stomach 1
27 Intestines 1
130 Liver 1
181 Intestines 1
4

Norwich Street
17 Neck 1

Nottingham Street
16 Rectum 1

O Street
9 Uterus 1
113 Breast 1
124 Bladder 1
3

Oak Avenue
20 Ovary 1
46 Stomach 1
2

Oak Street, (H. P.)
53 Uterus 1

Oak Street—(Boston)
3 Breast 1
36 Pancreas 1
2

Oak Street—(Charls.)
83 Intestines 1

Oak Square
8 Breast 1
70 Bladder 1
2

Oak Square Avenue
5 Stomach 1

Oak Terrace
21 Rectum 1

Oak Grove Terrace
18 Kidney 1

Oakdale Street
10 Liver 1

Oakland Street
9 Kidney 1
10 Uterus 1
2

Oakley Road
23 Prostate 1

Oakley Street
27 Intestines 1
37 Pancreas 1
2

Oakman Street
1 Intestines 1

Oakridge Street
16 Prostate 1

Oakview Street
5 Oesophagus 1
30 Stomach 1
2

Oakwood Street
22 Intestines 1

Ocean Street
11 Uterus 1
14 Intestines 1
47 Ovary 1
103 Uterus 1
4

Oldharbor Street
45 Breast 1
56 Breast 1
2

Olive Place
3 Stomach 1

Olney Street
7 Liver 1
15 Intestines 1
2

Oneida Street
33 General 1
36 Mesentery 1
2

Orchard Street
5 Intestines 1
6 Intestines 1
78 Intestines 1
94 Mesentery 1
4

Oregon Street
14 Intestines 1
19 Stomach 1
2

Orient Avenue
3 Stomach 1
170 Bone 1
2

Orkney Road
27 Rectum 1
40 Pancreas 1
2

By Streets and Houses—Continued

Orleans Street

83	Peritoneum	1
85	Stomach	1
108	Uterus	1
		3

Oscar Street

1	Uterus	1

Oswego Street

2	Prostate	1

Otisfield Street

8	Bladder	1

Oxford Place

2	Liver	1
5	Stomach	1
11	Liver	1
		3

Oxford Street

26	Liver	1
30	Liver	1
		2

Oxford Terrace

2	Breast	1

P Street

108	Prostate	1
128	Rectum	1
		2

Pacific Street

6	Intestines	1
9	Pancreas	1
9	Neck	1
		3

Page's Court

3	Stomach	1

Palfrey Street

4	Bladder	1
18	Lungs	1
		2

Palmer Place

4	Ovary	1

Paris Street

81	Kidney	1
100	Stomach	1
125	Stomach	1
206	Intestines	1
277	Stomach	1
296	Neck	1
317	Bones	1
		7

Park Square

2	Stomach	1
28	Stomach	1
		2

Park Street—(Bri.)

51	Breast	1

Park Street—(W. Rox.)

3	Rectum	1
8	Liver	1
74	Intestines	1
86	Stomach	1
107	Neck	1
110	Uterus	1
112	Uterus	1
127	Intestines	1
195	Intestines	1
228	Prostate	1
240	Breast	1
		11

Parker Street—(Chasn.)

28	Stomach	1

Parker Street—(Rox.)

141	Rectum	1
450	Vulva	1
679	Neck	1
683	Breast	1
684	Tongue	1
714	Liver	1
725	Stomach	1
726	Breast	1
727	Neck	1
760	Breast	1
781	Bladder	1
802	Liver	1
804	Pancreas	1
814	Intestines	1
826	Breast	1
952	Stomach	1
		16

Parker Hill Avenue

43	Intestines	1
760	Breast	1
		2

Parkman Street—(Bri.)

5	Liver	1
21	Stomach	1
21	Tongue	1
		3

Parkman Street—(Dor.)

2	Penis	1

Parkton Road

71	Breast	1

Park Vale Avenue

32	Intestines	1
56	Rectum	1
		2

Park Vale Street

3	Intestines	1
	Liver	1
		2

Parsons Street

24	Breast	1
28	Liver	1
56	Uterus	1
		3

Pasadena Road

15	Skin	1

Patterson Street

7	Uterus	1

Paul Gore Street

63	Rectum	1
96	Oesophagus	1
112	Lungs	1
126	Uterus	1
		4

Peabody Street

9	Throat	1

Pearl Street—(Chasn.)

37	General	1
40	Intestines	1
43	Liver	1
		3

By Streets and Houses—Continued

Pearl Street—(Dor.)

21	Breast	1
37	Breast	1
43	Uterus	1
43	Uterus	1
		4

Pelham Street

8	Uterus	1
52	Ovary	1
		2

Pembroke Street

1	Stomach	1
9	Bones	1
15	Tongue	1
33	Neck	1
47	Stomach	1
51	Lungs	1
67	Bladder	1
69	Stomach	1
69	Stomach	1
98	Uterus	1
113	Stomach	1
115	Uterus	1
		12

Penfield Street

37	General	1

Penhallow Street

15	Breast	1

Penobscott Street

16	Liver	1

Percival Street

50	Uterus	1
56	Liver	1
		2

Perham Street

60	Stomach	1
69	Breast	1
274	Breast	1
		3

Perkins Place

7	Intestines	1

Perkins Street

28	General	1
32	Stomach	1
56	Stomach	1
		3

Perrin Street

46	Lungs	1

Peterboro Street

45	Pancreas	1
50	Uterus	1
		2

Peter Parley Road

71	Lungs	1

Phillips Street

13	Intestines	1
15	Stomach	1
31	Oesophagus	1
43	Stomach	1
69	Peritoneum	1
86	Liver	1
		6

Pierce Street

19	Stomach	1
109	Stomach	1
		2

Pierce Avenue

64	Ovary	1

Pinckney Street

42	Oesophagus	1
45	Ovary	1
72	Prostate	1
76	Stomach	1
92	Tonsil	1
95	Stomach	1
		6

Pine Street

	Prostate	1
8	Oesophagus	1
		2

Plant Avenue

7	Liver	1
8	Uterus	1
		2

Playstead Road

12	Breast	1

Pleasant Street—(Chasn.)

5	Stomach	1

Pleasant Street—(Dor.)

4	Breast	1
7	Stomach	1
29	Rectum	1
38	Uterus	1
38	Intestines	1
76	Stomach	1
77	Vulva	1
85	Stomach	1
119	Neck	1
153	Stomach	1
		10

Plymouth Street

5	Skin	1

Polk Street

2	Liver	1
35	Bladder	1
43	Liver	1
		3

Pond Street

9	Stomach	1
14	Heart	1
47	Stomach	1
		3

Pope Street

34	Pancreas	1

Pope's Hill Street

5	Stomach	1

Poplar Street

42	Breast	1
51	Breast	1
88	Stomach	1
94	Stomach	1
103	Liver	1
104	Intestines	1
112	Stomach	1
		7

Porter Street

45	Stomach	1
59	Uterus	1
		2

Portsmouth Street

12	Mouth	1

Posen Street

12	Pancreas	1

Potter Street

84	Uterus	1

Powell Street

60	Intestines	1

By Streets and Houses—Continued

Powellton Road

25	Breast	1
28	Uterus	1
		2

Power Street

215	General	1

Pratt Street

9	Lungs	1
18	Breast	1
49	Uterus	1
		3

Preble Street

11	Stomach	1
76	Prostate	1
		2

Prentiss Street

33	Neck	1
45	Bladder	1
		2

Prescott Street—(E. B.)

6	Oesophagus	1
43	Breast	1
62	Breast	1
		3

Prescott Street—(Chasn.)

25	Breast	1

Prescott Street—(Rox)

26	Stomach	1

Primrose Street

31	Breast	1

Prince Street

32	Tongue	1

Princeton Street—(E. B.)

24	Uterus	1
28	Stomach	1
38	Intestines	1
106	Uterus	1
115	Liver	1
143	Kidney	1
184	Stomach	1
233	Liver	1
267	Liver	1
271	Intestines	1
285	Lip	1
316	Stomach	1
		12

Princeton Street—(Chasn.)

26	Liver	1

Prospect Avenue

14	Stomach	1

Prospect Street

18	Intestines	1
19	Prostate	1
26	Neck	1
78	Rectum	1
368	Liver	1
		5

Puritan Avenue

28	Stomach	1

Putnam Place

2	Intestines	1

Putnam Street

2	Ear	1
73	Rectum	1
133	Rectum	1
160	Breast	1
		4

Queensboro Street

11	Throat	1
15	Stomach	1
28	Breast	1
98	Pancreas	1
105	Vulva	1
		5

Quincy Street

24	Stomach	1
27	Rectum	1
53	Kidney	1
112	Intestines	1
156	Liver	1
208	Intestines	1
264	Stomach	1
455	Uterus	1
468	Rectum	1
		9

Quint Avenue

11	Bladder	1
16	Uterus	1
57	Intestines	1
61	Breast	1
		4

Radcliffe Street

14	Skin	1
14	Lungs	1
		2

Ramsey Place

4	Uterus	1

Ramsey Street

18	Stomach	1
23	Prostate	1
25	Stomach	1
		3

Randall Street

36	Intestines	1
45	Stomach	1
		2

Randolph Street

36	Stomach	1

Rawson Street

37	Intestines	1

Ray Street

5	Intestines	1
24	Kidney	1
		2

Raymond Street

35	Oesophagus	1

Reading Street

97	Throat	1

Readville Street

25	Uterus	1
45	Stomach	1
		2

Reed Street

60	Tongue	1

Reed Terrace

5	Uterus	1

Regent Circle

5	Stomach	1

Regent Court

4	Face	1

Regent Square

1	Intestines	1

By Streets and Houses—Continued

Regent Street

38	Ovary	1
69	Ear	1
124	Breast	1
124	Intestines	1
		4

Remington Street

3	Breast	1
6	Lungs	1
		2

Rena Street

2	Stomach	1

Revere Street

12	Liver	1
37	Liver	1
41	Bladder	1
74	Peritoneum	1
86	Stomach	1
		5

Richards Street

11	Breast	1

Richardson Street

14	Rectum	1
62	Intestines	1
		2

Richmond Street

74	Tongue	1

Ridgewood Street

51	Intestines	1

River Street (B.)

27	Breast	1
108	Cheek	1
		2

River Street—(H. P.)

586	Breast	1
659	Rectum	1
714	Liver	1
861	Uterus	1
873	Liver	1
915	Bladder	1
1017	Uterus	1
1117	Uterus	1
1481	Breast	1
1830	Liver	1
1841	Liver	1
		11

Riverview Street

39	Bladder	1

Riverway Street

394	Intestines	1

Roach Street

21	Intestines	1

Robert Street

69	Face	1

Robeson Street

45	Intestines	1

Robin Hood Street

3	Uterus	1

Robinson Street

49	Neck	1

Robinwood Avenue

28	Bladder	1

Rochester Street

33	Uterus	1

Rockingham Street

19	Rectum	1

Rockland Avenue

7	Uterus	1

Rockland Street

18	Tongue	1
19	Stomach	1
24	Gall bladder	1
63	Bladder	1
85	Uterus	1
101	Breast	1
		6

Rockledge Street

2	Stomach	1

Rockview Street

15	Intestines	1
17	Bladder	1
53	Uterus	1
		3

Rockville Park

19	Liver	1

Rockwell Street

47	Breast	1
54	Stomach	1
58	Brain	1
		3

Roddy Place

10	Breast	1

Rogers Avenue

10	Skin	1

Rollins Street

18	Pancreas	1
27	Jaw	1
		2

Romar Terrace

8	Uterus	1

Romsey Street

15	Intestines	1

Roseclair Street

19	Uterus	1
72	Uterus	1
		2

Rosedale Street

19	Intestines	1
34	Ovary	1
		2

Rosella Street

94	Uterus	1

Rosemary Street

17	Intestines	1

Rosemont Street

14	Rectum	1
15	Neck	1
38	Liver	1
43	Rectum	1
		4

Roslin Street

42	Throat	1

Roslindale Street

130	Stomach	1

By Streets and Houses—Continued

Rosseter Street

20	Breast	1
75	Stomach	1
164	Tonsil	1
		3

Rossetin Place

8	Uterus	1

Rossetta Street

91	Uterus	1

Rossmore Road

12	Throat	1

Rowe Street

7	Lip	1

Rowell Street

9	Neck	1
23	Intestines	1
		2

Roxana Street

18	Uterus	1

Roxbury Street

54	Tongue	1
87a	Uterus	1
308	Intestines	1
		3

Roxbury Terrace

3	Peritoneum	1

Roys Street

18	Stomach	1

Royal Street

22	Breast	1

Ruggles Street

50	Kidneys	1
59	Oesophagus	1
259	Stomach	1
		3

Ruskin Road

88	Breast	1

Russet Street

66	Uterus	1

Rutherford Street

47	Liver	1
69	Breast	1
		2

Ruthven Street

9	Rectum	1
128	Brain	1
		2

Rutland Square

11	Intestines	1
19	Rectum	1
20	Breast	1
36	Stomach	1
41	Breast	1
45	Uterus	1
47	Lip	1
84	Bladder	1
		8

Rutland Street

3	Liver	1
7	Stomach	1
		2

Rutledge Street

9	Larynx	1
9½	Rectum	1
		2

S Street

64	Stomach	1
172	Stomach	1
229	Breast	1
		3

Sachem Street

13	Tongue	1

Sagamore Street

6	Throat	1
11	Stomach	1
28	Liver	1
		3

Salcombe Street

42	Stomach	1

Salem Street

10	Stomach	1
17	Bladder	1
125	Uterus	1
137	Liver	1
		4

Salvation Street

19	Intestines	1

Salvisberg Avenue

5	Liver	1

Samoset Street

39	Stomach	1

Saratoga Street

21	Intestines	1
46	General	1
46	Uterus	1
143	Breast	1
243	Rectum	1
301	Gall bladder	1
320	Prostate	1
324	Kidneys	1
344	Bladder	1
404	Rectum	1
416	Intestines	1
425	Uterus	1
480	Oesophagus	1
653	Stomach	1
741	Uterus	1
799	Breast	1
821	Stomach	1
857	Stomach	1
955	Liver	1
1060	Stomach	1
		20

Sargent Street

47	Rectum	1

Saunders Street

38	Liver	1

Savin Street

3	Intestines	1
12	Stomach	1
15	Uterus	1
21	Stomach	1
21	Ovary	1
		5

Savin Hill Street

22	Rectum	1
23	Stomach	1
47	Tonsils	1
53	Lungs	1
59	Pancreas	1
62	Stomach	1
196	Uterus	1
233	Intestines	1
337	Rectum	1
341	Rectum	1
343	Stomach	1
		11

By Streets and Houses—Continued

Savoy Place

13	Jaw	1
13	Stomach	1
		2

Savoy Street

11	Uterus	1
17	Face	1
		2

Sawyer Avenue

4	Stomach	1
7	Rectum	1
60	Intestines	1
77	Vulva	1
		4

Sawyer Street

55	Liver	1

Saxton Street

32	Intestines	1
118	Stomach	1
		2

Sayward Street

17	Rectum	1

School Street

30	Liver	1
60	Pancreas	1
69	Breast	1
167	Others	1
173	Neck	1
177	Intestines	1
		6

Schuyler Street

15	Uterus	1

Seaver Street

20	Stomach	1
72	Stomach	1
82	Intestines	1
82	Breast	1
107	Lung	1
274	Lung	1
356	Prostate	1
391	Uterus	1
393	Stomach	1
401	Breast	1
		10

Seaverus Avenue

19	Liver	1
19	Lungs	1
50	Breast	1
		3

Sedgewick Street

81	Rectum	1
93	Bladder	1
		2

Selwyn Street

24	Intestines	1

Seminary Street

16	Lip	1

Sewell Street

7	Intestines	1
16	Intestines	1
		2

Seymour Street

40	Oesophagus	1

Shafter Street

11	Rectum	1

Sharon Street

38	Liver	1

Sharp Street

2	Breast	1

Shawmut Avenue

79	Liver	1
208	Lungs	1
245	Breast	1
265	Stomach	1
274	Stomach	1
301	Uterus	1
324	Intestines	1
330	Uterus	1
344	Rectum	1
411	Uterus	1
415	Bladder	1
431	Intestines	1
443	Jaw	1
450	Liver	1
458	Uterus	1
466	Stomach	1
599	Stomach	1
601	Uterus	1
633	Rectum	1
685	Stomach	1
691	Kidney	1
707	Uterus	1
741	Uterus	1
757	Liver	1
		24

Sheafe Street

6	Bladder	1

Shelby Street

32	Uterus	1

Sheldon Street

37	Uterus	1

Shepherd Street

56	Intestines	1

Shepton Street

16	Rectum	1
55	Breast	1
76	Oesophagus	1
		3

Sheridan Street

76	Stomach	1
97	Intestines	1
		2

Sherwood Street

24	Skin	1

Short Street

4	Rectum	1

Sidlaw Road

24	Intestines	1

Sidney Street

180	Oesophagus	1
185	Intestines	1
		2

Sigourney Street

1	Intestines	1

Silver Street

45	Uterus	1
118	Breast	1
130	Liver	1
164	Testes	1
297	Uterus	1
377	Liver	1
2460	Stomach	1
		7

By Streets and Houses—Continued

Smith Street

11	Larynx	1
23	Oseophagus	1
		2

Soley Street

43	Breast	1

Somerset Street

24	Rectum	1
26	Larynx	1
39	Intestines	1
		3

South Street

9	Uterus	1
31	Uterus	1
72	Stomach	1
85	Uterus	1
278	Uterus	1
730	Liver	1
817	Kidney	1
831	Uterus	1
893	Stomach	1
893	Rectum	1
1020	Rectum	1
1020	Rectum	1
1047	Uterus	1
		13

South Fairview Street

48	Uterus	1
55	Tonsil	1
		2

South Hampden Street

498	Stomach	1

South Huntington Avenue

37	Prostate	1
66	Stomach	1
		2

South Monroe Terrace

11	Stomach	1

South Russell Street

9	Intestines	1
47	Uterus	1
		2

South Worthington Street

1	Rectum	1
2	Stomach	1
		2

Southern Avenue

17	Liver	1
57	Intestines	1
104	Stomach	1
131	Vagina	1
		4

Southwood Street

179	Liver	1

Speedwell Street

8	Uterus	1
15	Stomach	1
		2

Spencer Street

12	Rectum	1
35	Liver	1
85	Stomach	1
		3

Spinney Street

9	Liver	1

Sprague Street

14	Stomach	1

Spring Park

20	Stomach	1

Spring Street

6	Stomach	1
43	Intestines	1
		2

Spring Garden Street

5	Intestines	1

Spring Park Avenue

20	Prostate	1
29	Breast	1
60	Rectum	1
63	Intestines	1
67	Intestines	1
67	Breast	1
		6

Springvale Avenue

243	Breast	1

Standish Street

12	Pancreas	1

Staniford Place

2	Stomach	1
9	Stomach	1
		2

Stamford Street

8	Intestines	1
34	Neck	1
37	Oesophagus	1
37	Uterus	1
47	Stomach	1
63	Uterus	1
146	Pancreas	1
160	Liver	1
		8

Stanley Street

7	Uterus	1
37	Intestines	1
		2

Stanton Street

52	Intestines	1
65	Kidney	1
		2

Station Street

8	Prostate	1

Stamiford Street

12	Stomach	1
81	Uterus	1
81	Uterus	1
84	Eye	1
131	Neck	1
		5

Storey Street

35	Intestines	1
53	Stomach	1
59	Stomach	1
		3

Stoughton Street

136	Tongue	1

Stratford Street

33	General	1
190	Prostate	1
		2

By Streets and Houses—Continued

Strathcona Road

7	Liver	1
11	Stomach	1
11	Intestines	1
43	Intestines	1
		4

Strathmore Road

104	Breast	1

Stratton Street

95	Testes	1

St. Alphonsus Street

53	Uterus	1
99	Intestines	1
		2

St. Andrews Road

2	Gall bladder	1
61	General	1
82	Liver	1
		3

St. Botolph Street

65	Rectum	1
67	Intestines	1
94	Uterus	1
125	Uterus	1
128	Liver	1
172	Stomach	1
181	Kidney	1
191	Stomach	1
196	Bladder	1
198	Uterus	1
		10

St. Charles Street

9	Kidney	1

St. Francis Street

7	Intestines	1
18	Bladder	1
36	Intestines	1
		3

St. Germain Street

18	Breast	1
32	Liver	1
42	Stomach	1
		3

St. James Street

14	Liver	1
27	Rectum	1
68	Skin	1
101	Liver	1
103	Stomach	1
		5

St. Joseph Street

15	Lungs	1

St. Lukes Road

14	Uterus	1
17	Bones	1
20	Bladder	1
		3

St. Margaret Street

8	Neck	1

St. Rose Street

26	Stomach	1
31	Stomach	1
34	Stomach	1
		3

St. Stephens Street

27	Stomach	1
52	Uterus	1
82	Breast	1
97	Pancreas	1
		4

Stockton Street

5	Stomach	1

Stuart Street

39	Stomach	1

Sudan Street

25	Breast	1

Sullivan Street

57	Uterus	1

Summer Street

10	Uterus	1
29	Breast	1
48	Stomach	1
79	Intestines	1
100	Stomach	1
128	Uterus	1
350	Intestines	1
361	Throat	1
		8

Summit Avenue

51	Liver	1
296	Stomach	1
302	Prostate	1
		3

Sumner Street

88	Kidney	1
90	Lip	1
158	Oesophagus	1
271	Pancreas	1
		4

Sunnyside Street

7	Liver	1

Surrey Street

38	Liver	1

Sutherland Street

96	Lungs	1

Swallow Street

7	Uterus	1

Sycamore Street

81	Cheek	1
105	Stomach	1
164	Breast	1
		3

Sydney Street

2	Intestines	1
43	Stomach	1
93	Breast	1
50	Stomach	1
151	Stomach	1
163	Kidney	1
		6

Sylvia Street

5	Uterus	1

Taber Street

15	Rectum	1
37	Stomach	1
		2

Taft Street

14	Bones	1
35	Stomach	1
		2

By Streets and Houses—Continued

Talbot Avenue

147	Bladder	1
147	General	1
192	Breast	1
210	Breast	1
239	Liver	1
242	Gall bladder	1
331	Liver	1
336	Breast	1
375	Breast	1
451	Prostate	1
487	Uterus	1
516	Breast	1
569	Liver	1
		13

Taylor Street

90	Rectum	1
116	Uterus	1
		2

Telegraph Street

5	Larynx	1
5	Intestines	1
73	Oesophagus	1
		3

Telford Place

3	Throat	1

Temple Street

6	Jaw	1
23	Intestines	1
25	Stomach	1
26	Stomach	1
99	Breast	1
130	Intestines	1
134	Penis	1
		7

Templeton Street

23	Brain	1

Templeton Way

6	Tongue	1

Terrace Street

46	Stomach	1
90	Intestines	1
136	Stomach	1
150	Lungs	1
		4

Tetlow Street

11	Stomach	1

Thane Street

28	Stomach	1

Thatcher Street

13	Intestines	1
19	Vulva	1
31	Others	1
187	Breast	1
		4

Theodore Street

33	Rectum	1
47	Bladder	1
		2

Thetford Avenue

15	Ear	1
62	Stomach	1
		2

Thomas Park

9	Kidney	1
15	Intestines	1
45	Stomach	1
		3

Thompsons Island

	Testicle	1

Thorn Street

1	Neck	1

Thorndike Street

12	Liver	1
52	Stomach	1
		2

Thornley Street

14	Intestines	1

Thornton Street

36	Oesophagus	1
45	Uterus	1
98	Liver	1
112	Neck	1
132	Intestines	1
		5

Thurston Street

18	Oesophagus	1

Tileston Place

5	Neck	1

Tileston Street

24	General	1

Tiverton Road

21	Stomach	1

Tolman Street

34	Intestines	1
44	Intestines	1
		2

Tonawanda Street

42	Intestines	1
55	Liver	1
143	Intestines	1
		3

Topliff Street

23	Lungs	1
89	Bladder	1
		2

Tower Street

81	Bones	1

Townsend Street

15	Stomach	1
58	Lungs	1
102	Intestines	1
124	Intestines	1
172	Breast	1
199	Kidney	1
206	Breast	1
		7

Train Street

47	Uterus	1

Treadway Road

15	Prostate	1
24	Stomach	1
		2

Tremont Street

4	Neck	1
39	Intestines	1
58	Uterus	1
72	Stomach	1
98	Tongue	1
356	Breast	1
434	Breast	1
488	Intestines	1
567	Ovary	1

By Streets and Houses—Continued

Tremont St.—Continued

577	Bladder	1
600	Uterus	1
605	Stomach	1
634	Intestines	1
641	Uterus	1
665	Prostate	1
667	Stomach	1
668	Rectum	1
673	Stomach	1
676	Stomach	1
691	Uterus	1
705	Stomach	1
709	Uterus	1
725	Stomach	1
981	Liver	1
1022	Stomach	1
1026	Rectum	1
1031	Rectum	1
1081	Intestines	1
1081	Intestines	1
1083	Pancreas	1
1085	Stomach	1
1086	Stomach	1
1133a	Neck	1
1195	Intestines	1
1309	Neck	1
1419	Oesophagus	1
1422	Oesophagus	1
1540	Stomach	1
1564	Liver	1
1566	Stomach	1
1568	General	1
1568	Lip	1
1572	Liver	1
		43

Trenton Street

77	Intestines	1
119	Stomach	1
145	Bladder	1
196	Kidney	1
		4

Trull Street

10	Intestines	1
17	Uterus	1
		2

Tuckerman Street

14	Skin	1

Tudor Street

12	Larynx	1
77	Oesophagus	1
135	Stomach	1
		3

Tufts Street

40	Throat	1
42	Liver	1
		2

Turner Square

15	Uterus	1

Turner Street

20	Ovary	1

Tuttle Street

52	Breast	1

Tyler Street

94	Stomach	1

Tyndale Street

61	Rectum	1
100	Intestines	1
		2

Ufford Street

19	Neck	1

Union Avenue

4	Stomach	1

Union Park

	Breast	1
11	Stomach	1
49	Pancreas	1
95	Uterus	1
95	Uterus	1
97	Uterus	1
111	Intestines	1
113	Intestines	1
120	Stomach	1
		9

Union Street

15½	Breast	1
24	Intestines	1
		2

Unity Street

1½	Mesentery	1
19	Stomach	1
		2

Upham Avenue

5	Rectum	1

Upton Street

26	Stomach	1
29	Intestines	1
32	General	1
34	Intestines	1
39	Stomach	1
39	Uterus	1
		6

Vale Street

54	General	1

Valentine Street

22	Rectum	1
32	Neck	1
33	Stomach	1
		3

Vancouver Street

11	Breast	1
17	Liver	1
		2

Van Winkle Street

10	Stomach	1
30	Rectum	1
83	Ear	1
		3

Vaughan Street

2	Throat	1
14	Uterus	1
		2

Vernon Court

1	Face	1

Vernon Place

11	Liver	1

Vernon Street

86	Prostate	1
87	Stomach	1
175	Uterus	1
		3

Victory Road

83	Stomach	1

By Streets and Houses—Continued

Village Road

20	Throat	1
31	Liver	1
33	Pancreas	1
77	Uterus	1
80	Stomach	1
88	Lungs	1
88	Liver	1
		7

Vine Street

22	Stomach	1
38	Stomach	1
		2

Vinson Street

116	Bones	1

Vinton Street

9	Stomach	1
25	Intestines	1
38	Bladder	1
		3

Virginia Street

10	Stomach	1

Wabon Street

1	Face	1
14	Bone	1
15	Liver	1
33	Mouth	1
		4

Wachusett Street

75	Stomach	1
91	Skin	1
161	Breast	1
		3

Wainwright Street

25	Lungs	1

Wakullah Street

15	Breast	1
26	Stomach	1
		2

Waldeck Street

35	Bones	1

Waldemar Street

52	Larynx	1

Walden Street

28	Uterus	1
37	Lungs	1
53	Intestines	1
		3

Waldorf Street

7	Liver	1

Wales Street

15	Prostate	1
42	Stomach	1
85	Stomach	1
		3

Walker Street

18	Rectum	1
25	Liver	1
75	Larynx	1
		3

Walk Hill Street

55	Stomach	1
55	Breast	1
71	Intestines	1
		3

Wall Street

5	Skin	1

Wallace Street

1	Bone	1
4	Stomach	1
7	Vagina	1
		3

Wallingsford Road

92	Intestines	1

Walnut Avenue

6	Liver	1
67	Uterus	1
76	Stomach	1
80	Stomach	1
115	Uterus	1
165	Bone	1
233	Intestines	1
291	Jaw	1
409	Stomach	1
431	Skin	1
		10

Walter Street

45	Jaw	1
49	Pancreas	1
77	Breast	1
99	Breast	1
		4

Waltham Street

75	Uterus	1
83	Lungs	1
		2

Ward Street

2	Pancreas	1
10	Liver	1
176	Liver	1
		3

Warland Place

1	Uterus	1

Warner Street

7	Stomach	1
46	Breast	1
		2

Warren Avenue

8	Larynx	1
37	Oesophagus	1
51	Liver	1
57	Tongue	1
153	Tongue	1
183	Bladder	1
185	Uterus	1
		7

Warren Square

2	Bladder	1
11	Rectum	1
		2

Warren Street

80	Stomach	1
93	Stomach	1
100	Bone	1
101	Breast	1
107	Intestines	1
149	Kidneys	1
319	Liver	1
340	Stomach	1
343	Intestines	1
387	Intestines	1
393	Bones	1
433	Stomach	1
548	Stomach	1
637	Stomach	1
	Neck	1
		15

By Streets and Houses—Continued

Warren Street (Charleston)

88 Uterus 1

Warrenton Street

11½ Stomach 1
35 Bladder 1
64 Rectum 1
82 Rectum 1
111 Ovary 1

5

Warwich Street

16 Stomach 1
26 Uterus 1
55 Stomach 1

3

Washburn Street

38 Bones 1

Washington Street

15 Intestines 1
34 Stomach 1
39 Lungs 1
48 Stomach 1
93 Breast 1
96 Mouth 1
105 Lung 1
139 General 1
143 Stomach 1
150 Lungs 1
174 Stomach 1
211 Uterus 1
257 Uterus 1
267 Uterus 1
276 Intestines 1
283 Stomach 1
285 General 1
309 Liver 1
345 Liver 1
372 Liver 1
414 Breast 1
419 Liver 1
437 Neck 1
493 Breast 1
572 Rectum 1
541 Stomach 1
571 Stomach 1
589 Stomach 1
668 Pharynx 1
716 Bladder 1
774 Intestines 1
868 General 1
943 Breast 1
943 Intestines 1
1020 Breast 1
1058 Intestines 1
1107 Stomach 1
1130 Lungs 1
1130 Lungs 1
1173 Rectum 1
1207 Oesophagus 1
1245 Stomach 1
1254 Rectum 1
1290 Liver 1
1300 Uterus 1
1318 Pancreas 1
1413 Intestines 1
1466 Prostate 1
1513 Prostate 1
1522 Neck 1
1522 Stomach 1
1595 Pancreas 1
1634 Intestines 1
1658 Intestines 1
1672 Uterus 1
1697 Stomach 1
1866 Rectum 1
1866 Breast 1
1942 Rectum 1
2161 Breast 1
2396 Stomach 1
2436 Breast 1
2542 Intestines 1
2619 Prostate 1
2654 Throat 1
2783 Uterus 1
2784 Breast 1
2792 Stomach 1
2893 Liver 1
2947 Bones 1
2952 Tongue 1
2985 Tongue 1
3123 Uterus 1
3148 Rectum 1
3189 Oesophagus 1
3298 Larynx 1
3347 Breast 1
3532 Liver 1
3577 Uterus 1
2585 Stomach 1
3903 Uterus 1
3920 Pharynx 1
3981 Breast 1
4294 Intestines 1
4313 Uterus 1
4313 Liver 1
4325 Oesophagus 1

87

Water Street

34 Throat 1

Waterford Street

1 Uterus 1

Waumbeck Street

109 Stomach 1
111 Liver 1

2

Waverly Street

16 Bladder 1
37 Breast 1
37 Breast 1
64 Stomach 1
73 Breast 1
81 Breast 1
374 Intestines 1

7

Waxford Street

48 Stomach 1

Way Place

3 Ovary 1

Wayland Street

69 Stomach 1
84 Ovary 1
98 Intestines 1

3

Wayne Street

5 Breast 1

Webster Street

30 Liver 1
100 Oesophagus 1
205 Bones 1
215 Stomach 1
235 Breast 1
263 Liver 1

6

Weld Avenue

13 Lungs 1

Weld Park

23 Intestines 1

Weld Street

32 Stomach 1
555 Prostate 1

2

By Streets and Houses—Continued

Weld Hill Street

24	Nose	1
39	Breast	1
57	Bones	1
67	General	1
		4

Welles Avenue

74	Stomach	1

Wellesley Park

5	Uterus	1
37	Rectum	1
		2

Wellington Road

7	Rectum	1
19	Breast	1
		2

Wellington Street

2a	Uterus	1
8	Uterus	1
18a	Pancreas	1
23	Intestines	1
23	Tongue	1
23	Larynx	1
24	Stomach	1
29	Breast	1
		8

Wellington Hill Street

110	Tongue	1
130	Uterus	1
		2

Wendall Street

11	Intestines	1

Wendover Street

15	Breast	1
19	Intestines	1
35	Rectum	1
		3

Wenham Street

53	Breast	1

Wensley Street

59	Oesophagus	1

Westerley Street

3	Uterus	1

West Broadway

29	Kidneys	1

West Brookline Street

61	Stomach	1
61	General	1
103	Breast	1
128	Stomach	1
130	Tongue	1
165	Jaw	1
165	Lungs	1
166	Intestines	1
169	Bone	1
169	Kidneys	1
		10

W. Canton Street

33	Stomach	1
145	General	1
146	Bladder	1
155	Breast	1
168	Bladder	1
176	Breast	1
182	Uterus	1
		7

W. Cedar Street

88	Stomach	1

W. Concord Street

84	Neck	1
102	Intestines	1
121	Breast	1
125	Rectum	1
177	Intestines	1
149	Intestines	1
		6

W. Cottage Street

69	Stomach	1
70	Intestines	1
		2

W. Dedham Street

14	Rectum	1
17	Intestines	1
17	Bones	1
55	Intestines	1
95	Peritoneum	1
		5

W. Eagle Street

34	Appendix	1
62	Rectum	1
66	Intestines	1
		3

Westminster Terrace

9	Stomach	1

West Newton Street

72	Stomach	1
76	Bones	1
133	Intestines	1
141	Bladder	1
153	Intestines	1
238	Uterus	1
		6

West Park Street

567	Prostate	1

W. Selden Street

138	Prostate	1
159	Oesophagus	1
206	Stomach	1
		3

W. Springfield Street

97	Gall bladder	1
97	Stomach	1
99	Bladder	1
133	Liver	1
159	Intestines	1
165	Liver	1
200	Liver	1
208	Stomach	1
219	Breast	1
		9

W. Tremlett Street

27	Stomach	1

W. Walnut Street

40	Stomach	1
41	Stomach	1
		2

Westerly Street

9	Stomach	1

Weston Street

41	Stomach	1

Western Avenue

198	Neck	1
276	Intestines	1
484	Prostate	1
		3

Westfield Street

5	Prostate	1

By Streets and Houses—Continued

Westland Avenue

14	Jaw	1
14	Lungs	1
24	Uterus	1
52	Breast	1
60	Uterus	1
68	Ear	1
91	Lungs	1
		7

Westminster Street

6	Uterus	1
14	Stomach	1
17	Intestines	1
53	Pancreas	1
90	Breast	1
92	Stomach	1
		6

Westview Street

8	Stomach	1

Westville Street

18	Bladder	1
20	Throat	1
114	Larynx	1
148	Breast	1
208	Stomach	1
208	Stomach	1
253	Oesophagus	1
		7

Weyanoke Street

5	Rectum	1

Wharf Street

21	Breast	1

Wheatland Avenue

87	Bladder	1
101	Bladder	1
115	Uterus	1
		3

Wheeler Street

29	Stomach	1

Whitley Terrace

16	Stomach	1

White Street

25	Rectum	1
33	Bones	1
42	Stomach	1
81	Ovary	1
		4

Whitemore Terrace

15	Liver	1

Whitfield Street

146	Breast	1

Whiting Street

24	Stomach	1
41	Pancreas	1
		2

Whitman Street

4	Lungs	1
17	Breast	1
17	Stomach	1
		3

Whitney Street

4	Stomach	1
8	Stomach	1
		2

Whittemore Terrace

10	Uterus	1
15	Throat	1
		2

Whittier Street

6	Intestines	1
19	Jaw	1
33	Uterus	1
38	Stomach	1
		4

Whittier Place

3	Intestines	1

Wigglesworth Street

7	Kidneys	1
12	Stomach	1
27	Breast	1
		3

Wilcock Street

51	Breast	1

Wilcox Road

15	Brain	1

Wildwood Street

37	Breast	1

Willard Street

14	Stomach	1

William Street

26	Vulva	1

Williams Street

15	Pancreas	1
19	Lungs	1
24	Stomach	1
32	Uterus	1
32	Stomach	1
55	Stomach	1
59	Bladder	1
		7

Willow Court

26	Prostate	1

Winchester Street

99	Testes	1

Windom Street

30	Rectum	1

Windsor Street

37	Stomach	1
65	Stomach	1
		2

Winfield Street

14	Kidneys	1

Winship Street

24	Intestines	1

Winslow Street

12	Jaw	1
34	Stomach	1
		2

Winter Street

46	Intestines	1

Winthrop Street

19	Stomach	1
20	Stomach	1
20	Bladder	1
24	Breast	1
32	Liver	1
32	Breast	1
32	Breast	1
110	Stomach	1
136	Intestines	1
137	Throat	1
148	Liver	1
173	Intestines	1
		12

Wise Street

10	Larynx	1

By Streets and Houses—Continued

Withington Street

46	Intestines	1

Wolcott Street

22	Intestines	1

Woodbine Street

33	Stomach	1

Woodcliffe Street

30	General	1
34	Stomach	1
46	Breast	1
51	Uterus	1
102	Lungs	1
		5

Woodford Street

7	Bones	1
30	Brain	1
63	Intestines	1
		3

Woodlawn Street

31	General	1
34	Bones	1
40	Uterus	1
65	Uterus	1
		4

Woodrow Avenue

7	Liver	1
112	Oesophagus	1
198	Liver	1
		3

Woodville Street

6	Stomach	1
37	Tongue	1
		2

Woodward Park Street

5	Uterus	1

Woodward Street

25	Liver	1
26	Jaw	1
50	Neck	1
		3

Woolson Street

43	Uterus	1

Worcester Place

4	Tongue	1

Worcester Square

5	Breast	1
6	Jaw	1
		2

Worcester Street

35	Stomach	1
39	Intestines	1
42	Uterus	1
42	Intestines	1
52	Stomach	1
57	Stomach	1
		6

Wordsworth Street

9	Bones	1
15	Stomach	1
31	Stomach	1
50	Liver	1
51	Stomach	1
72	Uterus	1
		6

Worthington Street

13	Uterus	1
13	Peritoneum	1
16	Breast	1
32	Breast	1
45	Intestines	1
		5

Wrentham Street

18	Liver	1
31	Rectum	1
36	Liver	1
59	Stomach	1
125	Uterus	1
		5

Wyman Street

24	Stomach	1
48	Tongue	1
60	Lungs	1
80	Liver	1
		4

Wyoming Street

30	Bladder	1
78	Oesophagus	1
		2

Yeoman Street

48	Stomach	1

York Street

28	General	1

Zeigler Street

84	Breast	1
93	Bone	1
		2

Second Street

155	Oesophagus	1
291	Liver	1
559	Prostate	1
579	Face	1
656	Breast	1
		5

Third Street

11	Intestines	1
11	Stomach	1
193	Liver	1
207	Intestines	1
207	Uterus	1
296	Intestines	1
515	Oesophagus	1
590	Larynx	1
744½	Breast	1
746½	Liver	1
792	Others	1
829	Uterus	1
		12

Fourth Street

123	Lip	1
314	Pleura	1
319	Stomach	1
377	Stomach	1
403	Uterus	1
416	Uterus	1
779	Nose	1
853	General	1
		8

Fourth Avenue

83	Intestines	1

Fifth Street

29	Oesophagus	1
139	Liver	1
223	Stomach	1
246	Neck	1
259	Breast	1
479	Oesophagus	1
761	Stomach	1

By Streets and Houses—Continued

Fifth Street—Continued

762	Breast	1
768	Uterus	1
807	Stomach	1
853	Stomach	1
866	Testes	1
		12

Sixth Street

151	Neck	1
522	Stomach	1
487	Larynx	1
524	Bone	1
590	Breast	1
609	Stomach	1
710	Tongue	1
734	Stomach	1
		8

Seventh Street

178	Breast	1
218	Intestines	1
468	Stomach	1
500	Intestines	1
522	Breast	1
637	Intestines	1
667	Stomach	1
719	Stomach	1
		8

Eighth Street

252	Jaw	1
267	Bone	1
281	Oesophagus	1
314	Breast	1
350	Uterus	1
352	Breast	1
552	Pancreas	1
587	Intestines	1
594	Breast	1
734	Tongue	1
		10

Ninth Street

164	Throat	1
224	Stomach	1
274	Tongue	1
		3

SOME CANCER PROBLEMS OF TODAY

SOME CANCER PROBLEMS OF TODAY

(An address delivered before the Philadelphia Medical Society, Philadelphia, Pa., November 5, 1925, and at a sectional meeting of the College of Surgeons, New Orleans, January 26, 1926.)

INFINITE is the realm of tumor science. Infinite is the scope and complexity of every problem that concerns the diagnosis, the treatment, the cure and the control of every form of affection due to cell-proliferation and its deathly effects upon the human organism. If there is any one thing above all others that concerns the practicing physician, the surgeon and the research worker, it is the better organization of the existing information, the facts and the principles of every aspect of tumor science. Thus far but a mere beginning has been made, and almost any one who essays upon the subject must be appalled by the magnitude of the superhuman task of bringing order out of the existing state of chaos and confusion.

What is fact and what is fiction? What is truth and what is error? What is useful and what is useless?—are all questions which arise at practically every stage of an inquiry into any phase of the subject of cancer research. Yet it is a question of the very first importance to realize clearly the necessity for some plan of orderly inquiry into the more essential facts of the whole matter. One must generalize before one can hope to successfully specialize, and this applies to both treatment and research.

We have recently heard much of the discovery of a *cancer "cause"* and far-reaching suggestions have been advanced that the problem of cancer control has at last been solved. But there are the most convincing reasons for holding that the "wish is father to the thought." In course of time we shall know about the practical value of the discoveries by Gye and Barnard, but in their present form they seem barren of any really useful results as regards treatment or, what is still more important, as regards the prevention and control of the many types and forms of malignant disease. In the words of an editorial in the London *Times*, taking much the same view, "these facts must be stated emphatically lest false hopes be raised or false conclusions be drawn." Even more emphatic is the opinion of the editor of the *Journal of the American Medical Association*, who observes:

"The critical reader of the reports in the *Lancet* obtains the impression that an intricate hypothesis has been developed on a small number of facts, and that if on reinvestigation by others new facts should be discovered, the hypothesis will collapse. In view of the weighty and abundant evidence that the production of cancer does not depend on or require a specific

cancer germ, and that some forms of malignant growths can scarcely possibly be produced by infection (*e. g.*, complex malignant teratoid neoplasms arising in the fetus in utero), it will require much more proof and repeated corroboration of these observations before it will be demonstrated that all cancer is caused by a 'cancer germ,' either with or without some chemical accessory agent."

My own cancer investigations have been chiefly concerned with the *statistical aspects* of the disease collectively considered, but on a world-wide scale. The outstanding result of my earlier studies was the unquestionable evidence of a continuous increase in the cancer death rate for most of the civilized countries for which useful data could be secured for a period of years. This conclusion was at first strongly opposed by those who questioned the accuracy of the statistics, the accuracy of the diagnosis in individual cases, the effects of age changes in the population, and of changes in the methods of death classification. I need hardly say that I had fully considered each and all of these difficulties, which more or less concern every inquiry into human mortality from particular causes of death. But granting the validity of the objections, they could not possibly assume major importance, but impair the conclusions only as a matter of degree varying with different sections of the world and special conditions affecting particular populations.

The question of cancer increase has recently been reinvestigated by Dr. J. W. Schereschewsky, summarized in the statement that—

1. "There has been a pronounced increase in observed death rates from cancer in persons 40 years and over in that part of the United States known as the ten original registration states.

2. "Part of this increase, about 30 per cent., is due to greater precision and accuracy in the filling out of death returns.

3. "The remainder, however, is an actual increase in the mortality resulting in a death rate between 25 and 30 per cent. higher than it was twenty years ago. (See *Journal American Medical Association*, October 17, 1925.)

According to the *Illinois Health News* of recent date, during 1924 cancer was the second most important cause of death in that state. In 1902 cancer was the cause of 2,542 deaths in Illinois, while during 1924 the number of deaths was 6,960, the cancer rate having increased from 51 to 101 per 100,000 of population.

In my address on the "Menace of Cancer" I gave the returns for the registration area from 1900 to 1910, showing an increase in the observed rate of mortality from 63.0 to 74.3 per 100,000 of population. Since that time I have had frequent occasion to point out that the rate has continued to increase, or to be specific, from 74.4 in 1911 to 81.4 in 1915 and 83.4 in 1920. During 1921 the rate was 86.0, while during 1922 it was 86.8. At the present time the rate is probably not less than 90 per 100,000 and possibly more.

We are thus confronted by the appalling fact that while the mortality from nearly every other important disease has been decreasing during the last twenty years, the cancer death rate is rapidly increasing. Let me make this point somewhat clearer by including some additional data for a few other causes of death suitable for the purpose. What follows applies only to the United States registration area.

Between 1900-1922 pulmonary tuberculosis declined from 182 per 100,000 to 86, typhoid fever declined from 36 to 7.5, pneumonia and influenza combined declined from 182 to 88, nephritis both acute and chronic declined from 89 to 88, cirrhosis of the liver declined from 12.9 to 7.5. Most of these results are attributable to the effects of the modern public health movement, and its coördinated health promoting activities. Conversely, however, diseases of the heart have increased from 132 to 166, but a part of this increase is the result of changes in death classification. Cerebral hemorrhage has increased from 76 to 88. There has also been an increase in the mortality from appendicitis from 9.7 to 14.2. In most cases the indicated decrease or increase has continued during the last two or three years. In no case, however, do these mortality changes for the worse approach in actual magnitude and importance the observed increase in the mortality from cancer.

I will not enter upon a discussion of the precise definition of cancer nor the best form of classification of different types of malignant and benign tumor affections. Much remains to be done in this direction that falls within the province of the pathologist, the clinician and the research worker. One important distinction should be made, however, in death classification, which should add materially to a better understanding of the situation. I have reference to the required distinction between carcinomas and sarcomas, which at the present time are combined under the term "cancer," largely as a matter of statistical convenience. We do not know at the present time what the actual mortality from sarcoma is in this country, although we are sufficiently well informed that it does not fall below 5 and does not exceed 10 per cent. in particular sections of the country. Those who wish to thoroughly understand the make-up of the present classification for official purposes should consult the titles and sub-divisions of title of the international list relating to cancer and other malignant tumors as given in the special report on the "Mortality from Cancer" published by the Division of Vital Statistics and the United States Census for the year 1914, Washington, 1916.

The first fundamental fact of the cancer situation is the varying degrees of cancerous affections in their relation to sex. In 1920 the adjusted male cancer death rate for the registration area of 1900 was 72.3 per 100.000 against an adjusted female rate of 101.6. The conditions are more pronounced at particular age periods as shown in the following table.

Table 1

CANCER MORTALITY BY SEX UNITED STATES 1920
REGISTRATION STATES OF 1910

(Rates per 100,000)

Age	Males	Females
45–54	120.8	230.9
55–64	338.4	451.6
65–74	641.4	730.5
75 and over	915.9	1020.8

It is thus shown that the female rate is decidedly higher at all the important periods of adult life than is the corresponding cancer mortality of males. This statement, however, does not justify the assumption that women are more liable to all forms of cancer, for that is not the case, as will later be shown, the excess in the female mortality arises chiefly out of the special liability of women to malignant affections of the generative organs and the breast. From other forms of cancer women, with some important exceptions, suffer decidedly less than men.

The second most important fact is the varying liability to cancer age or different periods of life. For both sexes combined the mortality rate at ages under 5 is 3.6, at ages 5 to 14 it is 1.6, at ages 15 to 19 it is 3.0, at ages 20 to 24 it is 4.7, per 100,000 of population. At all these younger ages, therefore, the relative death rate is comparatively unimportant, except as an indication that malignant diseases may occur at any time of life, although necessarily only in certain forms, particularly of the sarcomatic type. At ages 25 to 34 the rate is 15.0, at 35 to 44 it is 63.9, at 45 to 54 it is 173.8, at 55 to 64 it is 394.4, at 65 to 74 it is 687.0, and at 75 and over it is 974.1. Thus the cancer mortality rate does not become of relative significance until the forty-fifth year of age, subsequent to which it rises rapidly to the end of life. This statement requires to be qualified to the extent that there are reasons for believing that after 80 or 85 the rate in proportion to population slightly diminishes.

RACE AND NATIVITY

Next to sex and age, the cancer death rate is affected by *race and nativity*. Broadly speaking, the evidence is apparently quite conclusive that native races not living much in contact with civilized conditions are only rarely affected by malignant diseases. This question has been much in controversy and further research is required to place the conclusions upon a sound and incontrovertible basis. My own investigations among the Indians of South and Central America, the southwest of the United States and other parts of the country including Canada seem to fully support the conclusion that cancer is extremely rare among our native Indian population. It is likewise rare among the native populations of Africa not much in contact with civilization. An illuminating report upon this subject has lately been published by Dr. W. Watkins Pitchford in a contri-

bution to the *Medical Journal of South Africa* with reference to the "Prevalence of Cancer Among the Native Races of Natal and Zululand during the Four Years 1906-09." Dr. W. Watkins Pitchford points out in this connection that "it has been held that the apparent infrequency of cancer in negroes is mainly explained by imperfect opportunities for observation. This contention is hardly valid in the present instance, since the vigilance of every medical man and every magistrate has been officially requisitioned over the whole period of years. It is almost incredible that any natives who were subjects of such visible, agonizing and slowly destructive diseases as cutaneous, lingual, or mammary cancer would not have sought relief, sooner or later, at the hands of the white man. * * * No satisfactory evidence was obtained that would favor the supposition that close contact with Europeans increased the liability of natives to cancer. It should, however, be remarked that it could be but a very small fraction of the natives, viz., those who are in domestic service, whose diet and manner of life approach to those of the Europeans."

Summarizing the foregoing, Dr. Watkins Pitchford remarks that "bearing in mind the relative infrequency of malignant disease as a whole, it thus appears that negroes in South Africa are affected with sarcoma almost as frequently as with carcinoma, and that they exhibit a special liability to sarcoma of the subcutaneous tissue of the foot."

Previous to the Civil War medical reports from the southern sections of the country indicated a relative infrequency of cancer among the slave population. Cancer of the uterus was often stated to be practically unknown. At the present time the cancer death rate of our negro population closely approaches that of the white population in many sections of the country. For the year 1922, for illustration, the white cancer death rate of Louisiana was 80.7 while that of the colored was 68.7; for Kentucky the white rate was 55.6 and the colored 57.3; for Mississippi the white rate was 58.6 and the colored 53.0; while for North Carolina the white rate was 57.4 and the colored 57.5. Nativity, to the contrary, is a more complicated matter to deal with in view of the inadequacy of our information regarding the population of native birth but of foreign descent. Such evidence as is available seems, however, to prove conclusively that persons born in Ireland and Germany are decidedly more liable to malignant disease than persons native born of native stock. Conversely, the cancer death rate of the population born in Italy is decidedly below the general average. These results conform to the observed mortality in the home countries of the different races considered.

In view of the lower cancer death rate of Italians in this country when compared with natives, I had a table of cancer statistics for Italy prepared from official sources for the period 1887-1923. The table shows a gradual increase in the rate from 42.7 per 100,000 in 1887-89 to 71.4 in 1923, which for Italy is the highest rate on record. Even this rate is still very considerably below the average rate for the United States, which in 1922 was 86.8.

Table 2

CANCER DEATH RATE OF ITALY

Rate per 100,000

Year	Rate	Year	Rate
1887–89	42.7	1914	68.8
1890–92	42.8	1915	66.7
1893–95	45.2	1916	66.3
1896–98	50.2	1917	67.5
1899–01	52.3	1918	68.4
1902–04	55.0	1919	65.3
1905–07	60.7	1920	68.9
1908–10	64.8	1921	68.6
1911	66.8	1922	69.5
1912	64.7	1923	71.4
1913	66.7	1924	–

OCCUPATION

Another factor of considerable importance but only in specific instances is *occupation.* This phase of cancer mortality has not as yet received extended and thoroughly qualified consideration. The classical illustration of chimney sweeps' cancer is, of course, well known. There could be no more conclusive evidence of the causative relation of local irritation to cancer than in the case of chimney sweeps, who are troubled with a cancerous affection of the scrotum, attributed to soot irritation. Other instances are those of workers in aniline dyes, who suffer from peculiar cancerous affections of the bladder. Men employed in the making of artificial briquets suffer from cutaneous cancer of the hands and arms. In England, men employed in cotton mills as mule-spinners suffer also from a peculiar form of cancer of the groin directly attributable to occupational exposure. X-ray workers have frequently experienced disastrous results in consequence of long exposure to X-rays on the hands, developing X-ray dematitis, often ending in death. Seamen are claimed to be more liable to cancer of the skin, and the same statement has been made with reference to farmers much exposed to the sun and possibly irritating effects of strong winds. According to Prof. W. Dubreuilh of Bordeaux, "the accumulative effect of prolonged exposure to the violet and ultra-violet rays in sunlight is responsible for those changes in the skin which are often but erroneously ascribed to senility." He holds that malignancy in such cases is "no accidental supervention, but the final and inevitable stage of the process if it be continued over a long period, even if the stimulas has ceased to be active some time previously." Mere sunlight exposure cannot possibly be an important contributory cause in cancer, for it is not in countries with a large proportion of sunshine that cancer is seemingly most common, but further research in this direction is necessary before definite conclusions can be advanced.

On the extremely interesting subject of mule spinners' cancer a departmental committee of the British home office has just published a report

which includes an analysis of 539 cases of mule spinners' cancer recorded since 1876. The site of the disease was as follows: 450 affections of the scrotum; 31 of the head and neck; 23 of the upper limbs; 11 of the lower limbs; 6 of the groin; 13 of the generative organs, while the remaining five were a multiple affection of different parts of the body. An extended extract from the report with editorial comment appears in the *British Medical Journal* for April 24, 1926. The conclusions are summarized in the statement that, "we have thus conclusive evidence that certain mineral oils, including such refined mixtures as lubricating oil, are capable of inducing epitheliomatous formations when the subject has long been exposed to their action. Whether these oils are the direct immediate producers of the cancerous growth, or merely the principal factors that prepare the soil for some other and more general cancer-producing agent, is a scientific matter, which we are not called upon to settle. The broad fact is beyond reasonable dispute, namely, that in the absence of exposure to such mineral oils there would be no mule-spinners' cancer." The conclusions are amplified as to whether modification of the present mule machinery in cotton mills in order to prevent the oil from being sprayed on to the clothing of the workers would not be advisable. It would be extremely interesting to find out why this type of cancer has not been met with anywhere else in the world than England. Certainly among the large number of mule spinners in this country it would appear that there is not a single recorded case of this clearly differentiated type of malignant disease. Since the oil is the true cause of the affection and since without it cancers of this type do not occur, it should not be difficult to institute an exact comparison of the lubricating oils thoroughly analyzed as used in this country and in England. It would make a most valuable contribution to the study of cancer causation.

CHANGE OF RESIDENCE

One of the most perplexing aspects of cancer mortality investigations is in *changes in residence* of cancer patients, who in many cases leave the country to seek relief from their affection in the cities where institutional facilities are available. Many cities with excessively high local death rates attribute the excess to the non-resident factor, which it goes without saying in numerous cases must have a direct bearing on the local death rate. It will be possible in the near future to deal with this matter on the basis of an exhaustive investigation in a number of cities of this country made in connection with the San Francisco Cancer Survey. The investigation shows, for illustration, that the previous duration of residence on the part of those who died from cancer in San Francisco had been 33 years in the State of California and 22 years in the City of San Francisco. The proportion probably to be recorded as non-residents, or of those who have lived less than one year in the city, was not sufficient to disturb the general conclusion that the true cancer death rate of that city was unquestionably

excessive. The proportion of non-residents will, of course, vary with the extent to which hospital and other facilities for qualified treatment are available. This would be especially the case in cities like Boston, which in 1922 had a cancer death rate of 132.4 per 100,000; of Baltimore, which had a rate of 112.0; of Chicago, which had a rate of 107.9; of New York, which had a rate of 112.7; of New Orleans, which had a rate of 129.9; and of San Francisco, which had a rate of 142.0. The marked variations in the rates are clearly suggestive of local conditions not explained entirely by the non-resident factor. Memphis, for illustration, draws probably as large a non-resident element to its hospital as New Orleans, yet the cancer death rate of Memphis was only 100.6 while that of New Orleans was 129.9. The cancer death rate of the colored population of Memphis was 73.0 while that of New Orleans was 135.7. Obviously only a critical examination of the entire situation can produce results of definite value.

CANCER OF ORGANS AND PARTS

It has long been my conviction that no material progress will be made towards a practical solution of certain aspects of the cancer problem until the cancer death rate is analyzed as to its component part, or in other words, as to the differential liability of different population elements to different but thoroughly well defined *forms of malignant disease.* The grouping of cancers under the international classification of causes of death is, on the whole, quite inadequate to the purpose. The grouping at the present time includes: (1) cancer of the buccal cavity; (2) cancer of the stomach and liver; (3) cancer of the intestines, peritoneum and rectum; (4) cancer of the skin; and (5) other forms of cancer, or not specified. For the registration area of the United States for 1922 the cancer death rate for all forms of malignant diseases was 86.8. It was 3.0 for cancer of the buccal cavity, 33.4 for cancer of the stomach and liver, 11.7 for cancer of the peritoneum and rectum, 12.7 for cancer of the female generative organs, 7.8 for cancer of the breast, 2.8 for cancer of the skin, and 15.5 for cancer of other types or unspecified parts. The last named group covers a large number of malignant affections, some of which are of the utmost importance and should be more thoroughly studied in matters of detail.

The variations in local rates of frequency for particular *organs and parts* are of very considerable practical significance. Thus, for illustration, cancer of the skin in the registration states shows a rate of 2.4 per 100,000 for cities and of 3.2 for rural areas. This would seem to confirm the view that cancer of the skin bears some relation to outdoor or sunlight exposure. Cancer of the breast prevails at the rate of 7.8 in the United States registration area, but at a rate of 11.8 in California, 12.5 in Connecticut and only 3.8 in Florida, while the rate was 4.0 for the white population of Georgia and 5.5 for Louisiana. It was 9.6 for Maine and 13.4 for Massachusetts. Are these variations due to local conditions, differences in

habits, clothing, or mode of life, or are they the result of differences in the age and sex distribution of the population concerned? I shall have occasion to deal with some aspects of this phase of the problem later on, with reference to certain particular cities which I have investigated with special attention to this point.

An important question is the possible relation of *other diseases* to cancer occurrence. Of these for the present purpose I can only consider goitre. Diseases of the thyroid gland in 1922 caused a mortality rate in the registration area of 2.8 per 100,000, of which 2.1 was due to exophthalmic goitre and 0.7 to other diseases of the thyroid gland. Considering only the former, it appears that the disease prevails at a rate of 2.7 per 100,000 in the cities of the registration states, and at the rate of 1.4 in rural portions. The rate varies widely according to geographical distribution, being most common in the central west. For illustration, for Michigan the rate was as high as 3.4 per 100,000, while for Wisconsin the rate was 2.2 and for the State of Washington 2.8. There is apparently no correlation between excessive mortality rates from exophthalmic goitre and cancer, but the relative infrequency of the disease may preclude an accurate comparison on the basis of statistics not subjected to critical analysis.

CANCER AND GOITRE

Dr. Saleeby has called attention to the results of the investigations of medical experts connected with the Swiss Goitre Commission, which apparently indicates a well established relation between the distribution of goitre and cancer in that country. He also directs attention to a recent report by Dr. Percy Stocks, of work done under the direction of Prof. Carl Pearson, summarized in part as follows:

"(1) The distributions of goitre in recruits and school children and of cancer mortality in Switzerland show a small positive correlation which is apparently not accounted for by differences in healthiness as measured by the general death rate. (2) This correlation of general cancer mortality with goitre is found to arise from a very definite regional correlation between goitre and cancer of the stomach and oesophagus. (3) The selection rate of cancer of the stomach is generally high in other goitrous regions of Europe and America, and low in areas where goitre is infrequent, and this relation also holds good for sub-divisions of Norway and United States of America. (4) The examination of 1,000 London post-mortem records leads to the conclusion that enlargements and other anomalies of the thyroid gland are considerably more frequent in cancer cases than in non-cancer cases at death, and these anomalies are of the type usually associated with depressed thyroid function. (5) The enlarged or adenomatous thyroid gland is attacked more frequently than the normal gland both by primary and secondary cancer; the great majority of the cases in which a normal thyroid was secondarily involved were recurrent breast cancers with widespread metastasis. (6) Graves' disease probably affects about 100,000 persons in England and Wales; its prevalence as indicated by

corrected mortality rates is higher in rural than town areas, in coast than in inland areas, and on the west coast than on the east. (7) After correcting all known factors, the mortality from Graves' disease in the counties shows a small negative correlation with cancer mortality; this, as might be expected, is not so evident in the large town. (8) The above findings seem to indicate that defective functioning of the thyroid gland is favorable to the incidence of cancer of the stomach, and possibly of other organs also. (9) This leads to the suggestion that iodine prophylaxis applied after middle age, on the same lines as it is now being successfully applied to young persons in Switzerland for prevention of goitre, or some other form of thyroid administration, might result in diminishing danger incidence. That it is at all likely to seriously influence the growth of cancer once started is not suggested, though retardation might result. (10) It is admitted that some of the above conclusions are open to criticism, and that some of the facts might be explained in other ways, but before rejecting the hypothesis in the face of such evidence as there is, I contend that further research is called for, including if possible a direct experimental test of the results of prolonged iodine or thyroid administration to a cancerous strain of animals."

I have given this extract in full, since it does not admit of abbreviation without serious impairment. It is regrettable that there should be no available statistics regarding the geographical distribution of Graves' disease for this country, but the matter is obviously one well deserving of consideration. The conclusion, however, is quite definite that Swiss investigations clearly establish a correlation of cancer mortality with goitre when special consideration is given to cancer of the stomach and liver. No corresponding investigations have thus far been made in this country. Since the causative factor in goitre is now generally accepted to be iodine deficiency, there may be something in the conclusion that mineral deficiencies such as potassium or calcium or otherwise may lie in part at the root of certain forms of malignant disease. Goitre itself has only of late received extended consideration and much requires yet to be learned, as is emphasized in a brief discussion from a Norwegian source reported in the *British Medical Journal* of May 23, 1925.

Some astonishing statements regarding the prevalence of goitre among girls and young women in this country were recently made before the American Chemical Society at a Los Angeles meeting, by Dr. J. W. Turentine, of the United States Department of Agriculture, according to whom "as many as one-half of the girls in a belt extending from New York to the Rocky Mountains have the affliction in an incipient form, and that the number of cases, which already must amount to many thousands, is increasing as the population increases." Like cancer, goitre obviously demands much more consideration than it has thus far received, although it is fortunately a very much less fatal form of disease than malignant tumors. It has properly been pointed out in the Nation's Health that "it would seem to be the duty of health authorities in goitre regions to study the

various suggested procedures of treatment and take active steps to disseminate information in regard to their value."

NATURAL DURATION OF CANCER

However, the supreme question concerning cancer in its relation to the patient and the physician is the known *duration* of the *disease*. No phase has been more neglected as a statistical problem, although, in season and out, the earliest possible treatment has been insisted upon as a condition precedent to successful treatment. Unquestionably in many cases the patient is unaware of the development of the cancerous process until a serious condition has been reached. In many others there are months and often years of needless delay, with almost invariably fatal results to the patient concerned. It is no doubt difficult in many cases to determine with precision the seriousness of precancerous conditions or, for that matter, the actual onset of the disease when it can be diagnosed with reasonable certainty. In a large majority of cases the known duration of the disease clearly indicates unpardonable delay on the part of the patient and often negligence on the part of the attending physician. The principle is universally accepted as laid down by Dr. H. W. S. Wright, that "the chance of a cure in particular cases simply depends on the stage at which the case appears for treatment." Results of different investigations vary more or less, but it is generally assumed that the average known duration of the disease previous to qualified treatment is about two years. In my San Francisco investigation the duration was ascertained to be about eighteen months, or 1.3 years for males and 1.7 years for females. For the white population of New Orleans the corresponding average known duration was 1.4 years for males and 1.5 years for females.

In recognition of the great importance of the time factor, I have thoroughly examined into the known duration of cancer deaths with a due regard to the organs and parts of the body affected. The only fairly adequate discussion of the natural duration of cancer is by W. S. Lazarus Barlow and L. H. Leeming of the Cancer Research Laboratories of the Middlesex Hospital, reported in the *British Medical Journal* for August 16, 1924.

For the present purpose I will limit myself to a few important organs, as revealed by an analysis of the statistics for San Francisco. For 40 cases of cancer of the tongue among males, the average known previous duration was 13.4 months; for 17 cases of cancer of the jaw among males it was 10.3 months. For 288 cases of cancer of the stomach among males it was 15.2 months, while for 134 cases among females it was 15.3 months. For 91 cases of cancer of the liver among males it was 14.8 months, and for 79 cases among females 15.2 months. For 77 cases of cancer of the intestines among males it was 16.2 months, and for 103 cases among females 14.2 months. For 70 cases of cancer of the rectum among males it was 17.3 months, while for 44 cases of females it was 25.4 months. For 27 cases of

cancer of the ovaries it was 11.7 months, while for 206 cases of cancer of the uterus it was 23.5 months. This perhaps is the most suggestive result of my investigation, clearly revealing the greater hesitation on the part of women to seek early treatment even in such a readily accessible organ as the breast. Like considerations apply to cancer of the prostate, in which the previous known duration of the disease was 27.4 months. For 37 cases of cancer of the bladder among males it was 25.1 months. For 30 cases of cancer of the pancreas among males it was 8.7 months, and for 21 cases among females 10.5 months.

These illustrations will serve the present purpose of directing attention to the lamentable time lapse which is permitted to intervene previous to proper treatment. Of course, it may be argued that death certificates in this respect are not conclusive, and to a certain extent that is true. The average known duration of the disease as just given covers a period from the onset to death. But it is a safe assumption that in most of the fatal cases the duration of treatment was of comparatively short duration. More definite information on this point will be forthcoming in due course of time, when more than a thousand questionnaires concerned with living cancer patients have been examined. I may quote in this connection a statement by Dr. Wright that "the average duration of all the cases considered by me was two and one-half years before operation." Other estimates, particularly those of the Pennsylvania Cancer Commission, yield somewhat different results. At best, of course, the onset of the disease is a matter of conjecture and in probably no case can the facts be precisely established, but I feel that in a general way it is a safe assumption that the patient has suffered at least 18 months from the disease before qualified treatment was applied. Quite possibly the duration is even longer than that.

As a further illustration of the trustworthiness of the foregoing data I give some corresponding results for the white population of New Orleans. For 18 cases of cancer of the tongue in males the average previous known duration was 18.6 months. For 60 cases of cancer of the stomach in males it was 16.6 months, but in 43 cases of females the duration was only 11.5 months. In 20 cases of cancer of the liver the average known duration was 11.8 months, and in 25 cases of females 15.9 months. In 83 cases of cancer of the uterus the duration was 24.3 months, and in 49 cases of cancer of the female breast it was 26.5 months. In 16 cases of cancer of the prostate it was 25.2 months. In a general way, therefore, the New Orleans results confirm those of San Francisco. Since all the details of this investigation are given in their entirety in the second preliminary report on the San Francisco Cancer Survey, I will not further enlarge upon this aspect of the present discussion, but I may emphasize the wide range in the known duration for particular organs and parts, which, for illustration, for cancer of the stomach in San Francisco, for males varied from one month in seven cases to 132 months in one case. For females the duration varied from one month in three cases to 60 months in two cases. For can-

cer of the female breast the duration varied from one month in one case to 156 months in another case. Most of the deaths from cancer of the female breast had a known previous duration of twenty-four years. The variation in cancer of the uterus was from one month in three cases to 180 months in one case. Here also most of the deaths occurred with a previous known duration of twenty-four months.

Granting that these results have but a limited intrinsic degree of trustworthiness, they are nevertheless an interesting and practically useful contribution to cancer knowledge.

SOME ESSENTIALS OF THE CANCER PROBLEM

It would be a perfectly hopeless effort on my part to cover more than a few *essentials of the cancer problem* of today. What I have said represents many years of thoughtful consideration and an analysis of possibly the largest amount of cancer mortality material available to any one. I have been concerned primarily with the statistical facts of the cancer situation. Questions of treatment and after-results lie largely outside of the plan and scope of my investigations. No effort has been made to review many recent contributions, some of which are well deserving of extended consideration. Foremost among these I would place a work just published on "Tumors and Cancers," by Hastings Gilford, the author of a most important treatise on "Post-Natal Growth and Development." No one is better qualified than Dr. Gilford to consider questions of normal and premature development and their bearing upon matters concerned with the origin of cancer. In touching upon cure and prevention he emphasizes the removal of the material cause in its relation to the cure of cancer; the removal of the formal cause, or the circumvention of cancer; and third, the removal of the efficient cause, or the prevention of cancer. All of these are fully dealt with, but for the present I cannot enlarge upon the numerous questions raised. I will quote only the following among the general conclusions, that "cancer as a menace to society is of recent growth and must, therefore, arise out of new circumstances. We ask ourselves what are the circumstances in our present civilization which are novel and of a kind which might rise to such a degeneration as cancer? In other words, what great biological fault are we committing, that our forefathers did not commit, that we should be scourged with this horrible form of punishment? What have we done that is so heinous that only the prolonged torture and death of one in eight of those who attain middle-age is an adequate penalty for the crime?" Limitations of time do not permit of more than a reference to a single phase of the reply. The author remarks that "First, it has been shown that the increase in the liability to cancer does not affect all organs alike but is almost restricted to two groups, namely, the alimentary group and the reproductive group. These are just the two sets of organs which are most affected by the circumstances of modern civilization. Sir

Arthur Keith, in particular, has many times drawn attention to the rapid changes taking place in our jaws and other digestive apparatus owing to recent alterations in our habits with regard to food, and all these changes are of a regressive or degenerative character. In no respect do they indicate an advance, but always a retreat."

Dr. Hastings Gilford, therefore, fully supports what I frequently had occasion to point out, and that is the close relation which cancer bears to our modern civilization and the obvious changes in our *dietary habits.* Those who wish to follow this phase of the question more thoroughly should consult the wholly admirable presentation of an immense range of facts by Mr. J. Ellis Barker, with an introduction by Sir Arbuthnot Lane. Those who are particularly concerned with the cancer education of the public should consult a recent treatise by Dr. Charles P. Childe. Finally, some interesting aspects of the question are dealt with in a recent treatise on "New Cancer Facts," by David Masters, published in London, with an introduction by Sir James Cantlie. I wish to say, however, that I am not at all in agreement with the conclusion advanced in this work, that "cancer is a parasitical disease," while for the time being I am extremely skeptical of the second conclusion, that "the control of cancer is within our reach." A very illuminating but very brief discussion of "The Conquest of Cancer," by Dr. H. W. S. Wright, has recently been published by the Dutton Company of New York. There are certain misstatements in this work, which however do not impair its great value to the public.

While I am not qualified to deal with questions of treatment, I have not failed to give attention at least to the possibility of early diagnosis. Conversations with Dr. J. A. Shaw MacKenzie and others have fully convinced me of the great practical value of blood examinations, and I cannot do better than draw attention to a recent and extremely valuable discussion by this author on "Blood and Tissue Changes in Cancer with Reference to Diagnosis and Treatment," published in the *Journal of Tropical Medicine* for August 15, 1925. It is difficult to understand why the epoch-making work of Dr. Shaw MacKenzie has not long since attracted wider attention leading to the practical application of some of his theories. These are summed up in the statement that "there is a difference between normal and cancerous blood." If that is granted, an immense step in advance has been made with regard to the earlier diagnosis of cancer or the condition of the body affected by a cancerous growth long before such growths become obvious to the patient and the physician.

Thus progress in *treatment* is being made in practically every direction in which further advances are most urgently needed. Yet we are in need of more facts to bring home to the public the all important necessity of the earliest possible treatment. Dr. Wright has summed up the whole situation in a phrase which should become standardized in cancer education, that "it behooves us not to 'wait and see' whether we shall get it or not, but to 'look and see' that we have not got it." What the public is most

in need of is encouraging and convincing evidence, revealed by post-operative results, that modern cancer treatment is effective in a large and probably an increasing number of cases. The evidence to this effect which is at present available in a useful form is much too limited. No one has better summarized the situation in this respect than Childe, but his conclusions in most cases are based on too small a number of patients. Thus, for cancer of the breast, he refers to 34 cases who show the gratifying result that 50 per cent. were alive and well and without recurrence at varying periods from 6 to 13 years. He quotes another record of 100 consecutive cases, but of these only 17 were alive and well five years or more after operation. He quotes a third record of 46 cases, of whom 13 were alive and well and without recurrence five years or more after operation. He refers to cancer of the lip, giving a record of 537 cases treated at the Mayo Clinic, of whom 21 were inoperable, leaving 516, of whom 306 were subsequently traced. Of this number 40 per cent. had died, 59 per cent. were living, and 93 per cent. of the living had been free from recurrence for an average period of 7.8 years. Hence he estimates that the probable good results of a cure are about 72 per cent. He quotes with reference to cancer of the tongue, data furnished by Dr. Bloodgood. Of the early cases 62 were alive and well and without any sign of recurrence five years or more after removal. Of the 49 hopeless and inoperable cases, all had died. In cancer of the skin he quotes the record of 141 cases that have been traced, of whom 43 per cent. were alive, and of these 82 per cent. reported good results and had been free from the disease for an average of seven years. Unhappily at the present time it is estimated that from 40 to 50 per cent. of the cases which reach the surgeon are in a condition where the outlook is practically hopeless. Hence the inoperative necessity of a more effective form of public education, including a large proportion of the medical profession as regards the importance of the earliest possible diagnosis and the earliest possible qualified treatment.

CANCER AND RADIUM

In the light of much personal investigation and a careful consideration of trustworthy records, I am convinced that one-third of the present-day mortality from cancer could be prevented if the suggestion regarding the earliest possible diagnosis and the earliest possible treatment suggestions were carried into effect. As I understand the situation, the consensus of qualified opinion today has little faith in medical treatment for cancer and favors surgical treatment amplified in an increasing number of cases by radium, X-ray or cauterization. My investigations into the effects of radium treatment are far from complete, but the evidence is increasing that such treatment under given conditions on the part of a thoroughly qualified operator may prove decidedly beneficial. Surgery plus radium, therefore, seems to offer at the present time the best outlook for a successful cure, but radium, as well as X-ray, is a power the true nature and

extent of which are as yet imperfectly understood. The right dosage must be applied and can only be applied by a thoroughly trained radiologist in possession of a sufficient quantity of radium required for the purpose. An insufficient quantity of radium or X-ray may do more harm than good.

Thus, for illustration, it has been said that "it has been demonstrated that the increased duration of life following radium treatment in cases of *cancer of the prostate* is in direct proportion to the amount of radiation applied." With reference to cancer of the bladder it has been said that "while benign and malignant papilloma and the early papillary carcinomas disappear under the influence of radium, the infiltrating types have proven very resistant to this agent. The recurrence, however, responds to radiation in most instances, although in some it does not. Radium has certainly proved to be a valuable aid in the treatment of bladder tumors." With regard to *cancer of the breast*, Dr. Pfaler is on record as having said that "radium is a most useful agent in the treatment of palpable recurrent or metastatic nodules from carcinoma of the breast." At the recent International Congress of Radiology, Eintz of Erlangen urged all experienced X-ray specialists to publish their statistics, giving his own experience, having been to the effect that "in group one of his cases 95 per cent. had been clinically cured, in group two, 68 per cent. and in group three, 18 per cent." On the other hand, Sippel and Jackel, in reviewing the results of eleven years' practice at the Berlin University Clinic, are extremely skeptical, and state "in spite of improvements in technique and apparatus, recent results show no material advances," but their conclusions are based upon a relatively small experience. The investigations by Lazarus-Barlow at the Middlesex Hospital, to the contrary, seem to show that experience in treatment of cancer in irradiation is opening hopeful possibilities, but it is pointed out that "cells vary in radio sensibility," a fact which is often overlooked by those not thoroughly well informed. Without further enlarging upon this question, I may suggest that those who wish to pursue the subject further should consult an interesting discussion of "Some Principles of Treatment in the Radio Therapeutics of Cancer," by Dr. F. H. Johnson, published in the *Lancet*, September 27, 1924.

According to Voltz, on the "Results of Radium Treatment in Cancer of the Uterine Cervix," by Doderlein, "from 1912 to 1918, 755 patients were treated, of whom 110 were operable cases, with 43.6 per cent. cures; 130 were borderland cases, with 22 per cent. cures; 340 were inoperable, with 6.7 per cent. cures; 169 were hopeless cases, with one cure. Figures for 1918-19 for a total of 272 treated patients are essentially the same. The term "cure" means that five years have elapsed since the time of operation. In his report on cancer therapy from the surgeon's standpoint, Dr. Emil G. Beck of Chicago observes with reference to more than 200 cases that "some have stood a long test, one being 14 years, another 9 years, without a recurrence. We fully realize that a great deal can be accomplished with the

Roentgen rays and radium alone without the aid of surgery, and we do not subject every case to surgical operation. But we are trying to make a comparative study as to whether surgery combined with radiotherapy will accomplish more than either of them alone." In my own investigation the subject has not as yet received extended consideration. But efforts are under way to tabulate certain results obtained at the State Institute for Malignant Diseases, Buffalo, N. Y., where a considerable amount of statistical material is available for the purpose. In my San Francisco investigation, and for other cities, attention is being given to the question of gastric ulcer and its relation to malignant diseases.

According to the *Radium Journal of Paris*, for December, 1925, "among 403 cases treated by Regaud and his co-workers at the Paris Radium Institute, 362 were under observation for from one to six years. Disappearance of all signs of cancer was noted in an average of 26.2 per cent. under the radium treatment. They conclude from their experience that surgical treatment should be applied in adeno-epithelioma of the cervix; in cancer coinciding with infection of the adnexa, and in cases rebellious to radiotherapy. Hysterectomy is preferred for malignant disease confined to the uterus, and in dubious cases. Radium alone is indicated in cancer of the cervix with the parametrium intact. Roentgen ray alone is the method of choice in inoperable cases in which the correct use of radium is not practicable, and also for recurrence after hysterctomy. Association of Roentgen ray with radium is suggested if the parametrium is affected, but still accessible to radium."

THE PARASITICAL AND HEREDITARY ASPECTS OF CANCER

I have touched somewhat at random upon a few of the more important problems of cancer without having been able to do justice to any one of them. As the results of my own investigation become available, it is hoped that they may aid materially in broadening the plan and scope of future cancer research, for we must first know the fundamental facts of the present situation with a due regard to the past before we can hope to specialize to real advantage. I think that it no longer admits of a question of doubt that cancer is increasing and at a rate which justifies a statement used by me at the outset of my interest in the problem, that cancer is a menace and a by-product of our modern civilization. I also feel confident that the results of my investigation with particular reference to the time factor of the disease will serve a useful purpose and emphasize concretely to the public and the medical profession the evidence of lamentable delay in a large majority of cancer cases which terminate fatally at the present time. My investigations thus far in any event neither support the theory of cancer being a *parasitical affection* nor of the *hereditary transmission* of the disease from parent to offspring. This conclusion, however, does not affect the view that parasites in many cases may induce cancer as factors of

irritation. Likewise the conclusion does not affect the view that parents may transmit their dietary or other habits to their children as predisposing causes of a cancerous condition. While my references to the rarity of cancer in active races are only fragmentary, I speak from a rather extended familiarity with the facts when I repeat what I have often said, that the rarity of malignant diseases among primitive people is a fact and not an illusion. I regret that I could not have dealt with the important question of sarcoma, which demands separate consideration. It is also doubtful if most of the conclusions concerning carcinomas apply equally to sarcomas, but the latter constitute only from five to seven per cent. of the entire mortality, while the possibility of successful treatment is very much less than in the case of carcinomas. I likewise regret that I could not have enlarged upon the occupational aspects of cancer, but I may say that the subject will receive extended and exceptionally careful consideration in connection with my present investigations. Only those who have been engaged in statistical mortality research can appreciate what is involved in an effort to thoroughly grasp all the implications, inferences and conclusions derived from an analysis of more than 25,000 death certificates and more than a thousand elaborate records of living cancer cases. In its last analysis, such efforts as mine are primarily concerned with data that will serve the purpose of promoting the better education of the public and the medical profession in the essential facts of the cancer problem of the present day.

SPECIALIZED ASPECTS OF THE CANCER PROBLEM

The differential incidences of the *cancer death rate according to sex and organs and parts of the body* affected is possibly the most important, though in a measure one of the most neglected phases of the cancer problem. Taken in connection with locality, the calculations involved are exceedingly burdensome and time-consuming. Taken also in connection with the age distribution of the population, the result is a bewildering mass of statistics. To determine the precise correlation a long period of years is required to provide a satisfactory statistical basis for the minute examination of particular cancer facts in correlation to conditions that affect the particular rate of incidence. For the present purpose I shall limit myself to six cities, or, respectively, Albany, Boston, Buffalo, Chicago, New Orleans and San Francisco, for most of which data for five years have been utilized, though not for all.

For New Orleans the factor of race is also taken into consideration as regards the true effect of the race factor in its relation to sex and organs and parts of the body affected, in comparison or contrast with the white population. The following table will show the general cancer death rates according to sex for the cities above stated. The rates have been arranged in the order of the greatest frequency among the male population.

Table A

CANCER DEATH RATE ACCORDING TO SEX

Rate per 100,000 population

	Males	Females	Excess of female cases
San Francisco, 1920–24	148.7	149.1	0.4
Albany, N. Y., 1919–1923	130.7	167.6	36.9
Boston, 1920–24	124.9	163.0	38.1
Chicago, 1924	110.1	125.9	15.8
New Orleans (white) 1919–23	106.0	119.0	13.0
New Orleans (colored) 1919–23	79.8	126.4	46.6
Buffalo, 1922	70.5	89.9	19.4

According to this table the range in the *cancer death rate* for the male population for the five cities has been from 148.7 per 100,000 for San Francisco to 70.5 for the male population of Buffalo. For the female population there is a range in rates from 167.6 per 100,000 for Albany to 89.9 for the female population of Buffalo. The excess of the female over the male rate shows a rate of 0.4 per 100,000 for San Francisco to 46.6 per 100,000 for the colored population of New Orleans. These rate variations find their explanation not in the higher sex liability to cancer as such, but in the subsequently greater liability of women to particular forms of cancer, chiefly of course, cancer of the female genital organs and the breast.

CANCER OF THE STOMACH

Considering first the mortality from cancer of the stomach, it appears that for the five cities the rate shows a range for the male population from 45.1 per 100,000 to 19.4. For the female population the range is from 24.6 to 17.0. The excess in the male rate over the female rate is in almost the precise order of the frequency rate of the male population, ranging from an excess of 23.3 per 100,000 for San Francisco to 2.4 per 100,000 for Buffalo. I am not aware that a similar statement has heretofore been made available, emphasizing the decidedly greater liability of the male population to cancer of the stomach.

Table B

CANCER OF THE STOMACH

Rate per 100,000 population

	Males	Females	Excess of Males over Females
San Francisco	45.1	21.8	23.3
Albany	35.2	23.1	12.1
Chicago	33.9	23.4	10.5
Boston	31.7	24.8	6.9
New Orleans (colored)	29.0	18.9	10.1
New Orleans (white)	27.3	18.8	8.5
Buffalo	19.4	17.0	2.4

According to Vinson, "dysphagia, hiccough and regurgitation were the early symptoms noted in the 152 cases analyzed by him. Most of the patients gave a history of bolting food, meals at irregular intervals, and many used alcohol to excess. Dental sepsis was almost always present. A history of previous trauma to the oesophagus was not elicited in any case. Radium or Roentgen-ray therapy was found practically valueless."

For England and Wales in 1922 the death rate for cancer of the stomach, excluding deaths from cancer of the liver and gall-bladder, was 20.5 for males and 18.7 for females. For Holland, however, the rate was 73.4 for men and 58.0 for women, an extraordinary mortality which only of late has attracted attention. For the City of Basle, Switzerland, the male rate for cancer of the stomach was 59.3, while the female rate was 32.6. For Norway, for both sexes combined, the rate was 48.8. According to Duggan, reviewing 50 cases, 56 per cent. were adeno-carcinoma, 20 per cent. were scirrhous, 8 per cent. colloid, and 16 per cent. of a not specified type. The favorite seats of metastases were: regional lymph nodes in 52 per cent.; liver in 58 per cent.; pancreas in 26 per cent.; lungs in 22 per cent.; omentum in 18 per cent.; mesenteric nodes in 20 per cent.; retroperitoneal nodes in 16 per cent.; peritoneum in 14 per cent.; suprarenals in 12 per cent.; spleen in 10 per cent.; diaphragm in 8 per cent.; large and small intestine in 18 per cent.; and mediastinum in 12 per cent. The less common seats of metastases were: gall-bladder in 6 per cent.; oesophagus in 4 per cent.; pleura in 4 per cent.; kidney in 2 per cent., etc. Bilateral carcinoma of the ovary was found in two cases. There were associated arteriosclerosis in 16 cases and chronic nephritis in six. Mention should also be made of a report from Vienna, in the *Journal of the American Medical Association*, dated June 25, 1924, to the effect that "necropsy reports of the Vienna Pathological Department clearly prove that cancer of the stomach is increasing in frequency. It was 2.28 per cent. in 1918 and 3.6 per cent. in 1923. It is significant, however, that incorrect diagnoses were made in more than 18 per cent. of the cases. The operative mortality was over 10 per cent."

CANCER OF THE LIVER AND GALL-BLADDER

Cancer of the liver and gall-bladder shows some decidedly interesting variations both as to locality and as to sex incidence. The rate for males was highest in San Francisco, or 13.5 per 100,000, and lowest in Buffalo, or 4.3. For females the rate was highest in Chicago, or 23.4 per 100,000, and lowest for the colored population of New Orleans, or 5.7. For San Francisco and for the colored population of New Orleans the rate was higher for the male than for the female population, while in the remainder of the cities the female rate was more or less in excess, reaching a maximum in Chicago, where the male rate was 7.5 and the female rate 23.4 per 100,000 of population.

Table C

CANCER OF THE LIVER AND GALL-BLADDER

Rate per 100,000 of population

	Male	Female	Excess of Male Rate	Excess of Female Rate
San Francisco	13.5	12.1	1.4	–
New Orleans (colored)	12.7	5.7	7.0	–
Boston	10.6	14.1	–	3.5
New Orleans (white)	9.3	11.3	–	2.0
Chicago	7.5	23.4	–	15.9
Albany	7.4	17.2	–	9.8
Buffalo	4.3	10.3	–	6.0

CANCER OF THE PERITONEUM AND INTESTINES

Cancer of the peritoneum and intestines shows a range in frequency for the male population from 14.8 for Albany to 5.3 for the colored population of New Orleans. For the female population the range is from 21.7 for Albany to 5.4 for the colored population of New Orleans. With the exception of Buffalo, in all of the cities the female death rate from cancer of the peritoneum and intestines exceeds the male rate, the excess being greatest in the City of Albany, while in the City of Buffalo the male rate exceeds the female rate by 1.2.

Table D

CANCER OF THE PERITONEUM AND INTESTINES

Rate per 100,000 population

	Male	Female	Excess of Male Rate	Excess of Female Rate
Albany	14.8	21.7	–	7.1
Boston	13.3	21.6	–	8.3
San Francisco	12.4	16.7	–	4.3
Chicago	10.4	11.6	–	1.2
Buffalo	9.1	7.9	1.2	–
New Orleans (white)	5.4	8.0	–	2.6
New Orleans (colored)	5.3	5.4	–	0.1

Contrary to Aschoof, Finstere finds that cancer develops in gastric ulcers quite frequently. Among the 175 cancers resected by him during the last ten years, 26.6 per cent. had developed on the basis of ulcers, and—which is still more important—among the 145 patients in whom he resected a supposedly pure gastric ulcer, 21.4 per cent. had cancer. It is impossible to make the diagnosis during operation without the histologic findings. A few instructive cases, in which callous ulcers of long standing developed into cancers, are given. He criticizes the statistics which seem to demonstrate the rarity of development of cancer from gastric ulcer. The observation is correct only in ulcers of the duodenum; he saw no instance of cancer in his 439 resected duodenal ulcers. He emphasizes the importance of his statistics for the indications of resection. Every hard ulcer should be resected before cancer develops. Once it penetrates into the pancreas, the patient is hardly to be considered operable.

CANCER OF THE RECTUM AND ANUS

There is a variation in the frequency of cancer of the rectum and anus from 9.6 for the male population of San Francisco to 2.0 for the white population of New Orleans, and for the female population there is a range from a maximum of 8.2 for the colored population of New Orleans to 3.5 for the white population of New Orleans. The male rate was in excess of the female rate in San Francisco, Albany and Chicago, the same in Buffalo, but the female rate exceeded the male rate for the white and colored population of New Orleans. The wide range of frequency for the male population is rather extraordinary and well deserving of further consideration.

Table E

CANCER OF THE RECTUM AND ANUS

Rate per 100,000 population

	Male	Female	Excess of Male Rate	Excess of Female Rate
San Francisco	9.6	6.4	3.2	–
Boston	7.8	7.8	–	–
Albany	6.3	5.9	0.4	–
Buffalo	4.3	4.3	–	–
New Orleans (colored)	4.1	8.2	–	4.1
New Orleans (white)	2.0	3.9	–	1.9

According to Mummery, the contributory conditions in *cancer of the rectum* include the following:

"Cancer tends to arise in the situation of old chronic ulcers of the rectum, upon the openings of chronic fistulae, and at the site of strictures previously of a non-malignant character. Further, I think there can be no doubt that simple tumors of the rectum and colon have a marked tendency to become malignant in course of time. I believe that the majority of cancers of the rectum start in the first place as simple adenomata. We are still, however, completely in the dark as to what causes the change. I have frequently seen cases in which a simple adenoma has subsequently developed into a malignant growth. Again, one not infrequently sees cases of adenoma of the rectum in which malignant growth has already commenced in some portion. So convinced am I of the danger of malignant disease supervening upon simple adenomata, however small, that I would never leave any portion of a polypus or adenoma in the rectum if it could possibly be removed. If it were only possible for the rectum to be examined periodically and any simple adenomata removed, I believe many cases of cancer of the alimentary tract would be prevented. * * * Cancer of the large bowel appears to be commoner at those points at which any special friction in the contents is liable to take place. At least this would appear to be the explanation of some of the facts." ("Disease of the Rectum and Colon," New York, 1923.)

CANCER OF THE OESOPHAGUS

Cancer of the oesophagus shows a maximum rate of frequency of 8.8 for the City of Chicago and a minimum rate of 0.4 for the male colored popu-

lation of New Orleans. For the female population, Chicago also shows a maximum rate of 2.3, while there were no deaths from cancer of the oesophagus among the colored population of New Orleans. The male rate is in excess of the female rate in all of the cities, clearly emphasizing that cancer of the oesophagus is of very rare occurrence among the female population.

Table F

CANCER OF THE OESOPHAGUS

	Male	Female	Excess of Male Rate
Chicago	8.8	2.3	6.5
Boston	8.2	1.9	6.3
San Francisco	7.7	0.9	6.8
Albany	7.4	1.0	6.4
Buffalo	5.1	1.2	3.9
New Orleans (white)	4.2	0.5	3.7
New Orleans (colored)	0.4	–	0.4

William Hill, in the *British Medical Journal* of December 8, 1923, makes the observation that in his investigations "the number of those individuals who were found to be the victims of cancer of the oesophagus gave a clear history of excessive drinking of either ardent spirits or very hot fluids or both, but has not been such as to impress me with a correctness of the alleged association implying cause and effect." He, however, does not deny that such a causative relationship might possibly exist.

In the *Journal of the American Medical Association* of September 29, 1923, is a brief discussion of the results obtained by Jean Guisez. With regard to the treatment of the oesophageal cancer his opinion of surgical intervention is not very high. His own successes have resulted chiefly from the use of radium. In the space of thirteen years he has treated 170 cases of cancer by the local application of this substance. The diagnosis was verified by biopsy. In 92 of these a cure was apparently effected. In 18 of them the cure has been maintained both clinically and oesophagoscopically over a period varying from one to eleven years. In this connection a brief reference may be made to the alleged frequency of cancer of the oesophagus among the Chinese, due to the alleged eating of rice. There has never been a really authoritative statement based upon trustworthy evidence that would support this widely accepted conclusion.

W. Fischer, in a German Clinical Weekly under date of December 9, 1924, rejects the foregoing view, pointing out that "what little is known respecting the etiology of cancer of the oesophagus, there are many facts in favor of the view that it is excited by chronic irritation. The disease occasionally develops in an old stricture due to injury by the oesophageal sound, or following the pressure of an aneurysm, or an exostosis from the body of a vertebra." He adds that cancer is most liable to develop at the three points where the oesophagus is narrowest. The disease is much more common in men than in women. The influence of alcoholic excess has

been much disputed. In Argentina the disease has been regarded as the result of drinking very hot "mate"; in China the drinking of hot arrack has been regarded as an exciting cause. The author thinks that alcoholism is a possible exciting cause; and in hot arrack and hot "mate," both chemical and thermic irritation may act as exciting factors. Other factors, as regards diet and other irritation, possibly play an important part in the etiology.

Finally, there may be included here a brief observation by Blauwkuip, reported under date of August 30, 1924, to the effect that of 125 cases of cancer of the oesophagus observed in the municipal hospital of Amsterdam, 112 were males and 13 females. The distribution of the lesions was as follows: Upper third of oesophagus, 28 cases; middle third, 51 cases; lower third, 44 cases; doubtful, 1 case; upper and lower third, 1 case. In 13, metastases of various sizes were found in the wall of the oesophagus. They were usually situated beneath the mucous membrane in the neighborhood of the primary tumor, but sometimes 15 cm. distant from it. In 80 cases metastases were found in remote organs, and in 59 there were metastases in the lymphatic glands. In 49 cases, or about one-third of all the patients, the process remained localized on naked-eye examination.

CANCER OF THE LARYNX

According to St. Clair Thomson, "in intrinsic cancer of the larynx it ought to be generally recognized that hoarseness was the first symptom. Persistent hoarseness for more than three weeks should lead to the case being examined by an expert. Sir Felix Semon used to regard fixation of the cord as the characteristic common and early symptom. It was certainly characteristic, but it occurred late, and unfortunately many cases escaped treatment because, it was said, the cord was mobile. But to wait until the cord became immobile meant a deeper infiltration."

Cancer of the larynx prevailed mostly among the white male population of New Orleans, or at the rate of 5.1. The rate was lowest for the male colored population of New Orleans, or 0.8. The rates for the female population are negligible. In all of the cities the male rates materially exceed the female, while in Buffalo and New Orleans among the colored population no deaths from cancer of the larynx occurred among females.

Table G

CANCER OF THE LARYNX

Rate per 100,000 of Population

	Male	Female	Excess of Male Rate
New Orleans (white)	5.1	0.5	4.6
San Francisco	4.3	0.4	3.9
Albany	4.1	0.3	3.8
Chicago	3.1	0.4	2.7
Boston	3.0	0.4	2.6
Buffalo	2.0	–	2.0
New Orleans (colored)	0.8	–	0.8

CANCER OF THE THROAT

Cancer of the throat is very rare among the female population, but it is of relatively high frequency among the male population. The rate was highest for the white male population of New Orleans, or 2.8 per 100,000, followed by Albany with a rate of 2.6, Boston 2.2, and San Francisco with a rate of 1.5. For Chicago the male rate was 0.8, for Buffalo 0.4, and the same for the colored male population of New Orleans.

The highest mortality from cancer of the throat among the female population occurred in Albany, or at the rate of 0.7 per 100,000.

CANCER OF THE NECK

Cancer of the neck is of rare occurrence among the female population, but among the male population the rate reported for New Orleans was 4.6 per 100,000, followed by San Francisco with a rate of 4.4, Boston with a rate of 3.6, and Albany with a rate of 3.3. For Chicago the rate was 1.5, for Buffalo 0.8, and for the colored population of New Orleans 0.4.

The rates for the female population were negligible, the maximum rate having occurred in Albany, or 1.7 per 100,000, followed by the white female population of New Orleans at the rate of 1.2.

CANCER OF THE TONGUE

Cancer of the tongue is also extremely rare in the female population, but for the male population the rate shows a range from 6.4 for the white male population of New Orleans to 5.1 for San Francisco, followed by a rate of 4.1 for Boston and of 3.7 for Albany, 2.2 for Chicago, and 1.2 for Buffalo and the colored population of New Orleans. The rate for the female population has been less than one per 100,000.

According to Dr. Charles Ryall, Surgeon at the Cancer Hospital, London, "the relation of syphilis to cancer of the tongue occurred in over 80 per cent. of the cases." Sir D'Arcy Powers is equally emphatic in the view that cancer of the tongue becomes invariably greatest in connection with syphilitic infections. Hastings Gilford quotes Cougerot to the effect that of 157 cases of syphilis of the tongue, 102 were associated with cancer of the same part. He also quotes Powers, who observes "you must be a smoker or a syphilitic; and those who combine those two conditions, especially the latter, have a much greater risk than other people. Cancer of the tongue, therefor, might be called the cancer of syphilitic smokers." There are those who claim that cancer of the tongue is primarily related to oral sepsis. But this view is in all probability incorrect if disassociated from syphilis and smokng habits.

On the early diagnosis of cancer of the tongue, Kummel emphasizes the necessity for palpating the tongue, because the tumor may be under the mucosa. Soft fibromas or lipomas are not as hard as cancer, and have definite limits. Some epitheliomas may have also sharp limits, but they are

usually ulcerated. A submucous tumor in the middle line on the base of the tongue may be a goiter. Tuberculosis, syphilis and actinomycosis may simulate a cancer, especially before ulceration. A syphilitic gumma is very important for diagnosis because of its curability. Yet he warns against considering a slight amelioration after treatment as a proof of the syphilitic nature of the tumor. Great pains are typical in deep carcinomas. Carcinoma developing from leukoplakia is not very obvious, but should be easily diagnosed, if the physician would think of the possibility. Decubital ulcers must have their cause in rough teeth; they disappear with removal of the cause.

Bloodgood reviews the facts with regard to cancer of the tongue in the *Journal of the American Medical Association* for August 15, 1925. Referring to an earlier article of his in the *Journal* of July 15, 1921, in which he summarizes his experience with cancer of the tongue for thirty years. In brief he observes: "My records fail to show a single cure of a cancer of the tongue of sufficient extent to justify an operation which would render the use of a stomach-tube imperative for a long time. In the last five years, especially, I have had the opportunity to observe and treat so many early cases of cancer of the tongue that I have concluded that the routine complete excision of glands of the neck for early cases of cancer of the tongue is not justifiable by the evidence. If the glands are involved, the probability of a five-year cure is less than 10 per cent.; if they are not involved, it is unnecessary to remove them. At the present time in cancer of the lip the reverse conclusion is true, because if the glands are involved the chances of a five-year cure are 50 per cent." He also observes that he had been unable to obtain any evidence that Roentgen rays or radium alone have accomplished a cure when the glands are involved.

To the foregoing I add a statement by Truesdale, in the *Annals of Surgery* for October, 1923, to the effect that, with reference to cancer of the tongue, "prognosis is not hopeful in patients under forty years of age, except in the initial stages; in the absence of operative treatment the average duration of life is two years. The operative mortality is now not more than five per cent., and the proportion of cures persisting after three years is at least 30 per cent. The treatment is surgical in the operable stages; X-rays and radium are found to be disappointing." He advocates the use of the cautery for the purpose of dissection.

With reference to the mention of the possibility of a lesion at the base of the tongue being of goiterous origin, mention should be made of a case of a carcinoma in an aberrant thyroid at the base of the tongue reported by Dr. Astley P. C. Ashhurst and Dr. C. Y. White of Philadelphia, in the *Journal of the American Medical Association* for October 17, 1925.

CANCER OF THE LIPS

Cancer of the lips is a comparatively rare affliction almost entirely limited to the male population. The highest rates that are reported are for Albany,

of 1.9, for Boston 1.2, and for San Francisco 1.1. For Chicago the rate was 0.4, for the white male population of New Orleans 0.5, and for the colored male population of New Orleans 0.8. There were very few deaths from this type of cancer reported for Chicago and San Francisco, and none for Buffalo.

According to Bloodgood, as quoted by Hastings Gilford, "lesions of the lower lip suggestive of epithelioma should be excised under local anaesthesia in preference to treatment by rays. His experience of some 500 cases in the course of thirty years is that 65 per cent. of the lesions excised are microscopically benign, and of the remaining 40 per cent. three-fourths of the lymph nodes when removed show no evidence of metastasis."

The same author quotes Brewers' statistics of cancer of the lip, comprising 537 cases. "Cases in which the primary lesion alone was excised showed no recurrence in 66 per cent. of the cases after five years. Cases in which the primary lesion and submaxillary lymph nodes excised showed no recurrence after five years in 92 per cent. of the cases, while the third group, in which the primary lesion and lymph nodes were both affected and excised, showed no recurrence in 34 per cent. of the cases."

For some extremely interesting observations on cancer of the lip, see "Cancer and the Public," by Charles P. Childs. Referring to the use of hot clay pipes as a causative factor he observes: "Patients can nearly always tell you that the cancer appeared on the side on which they used the pipes." But another factor to be considered is the irritation caused by broken, decayed or irregular teeth. He is also of the opinion that cancer of the lip is comparatively rare among the upper classes, which he explains by the greater care the latter take of their teeth, and if they use a pipe at all, one is used which is not made of clay. In my investigations the correlation of cancer of the lip to excessive smoking of pipes is certainly striking.

CANCER OF THE JAW

This is a somewhat more common affliction, almost entirely limited to the male population. The rate was highest in Albany, or 3.0 per 100,000 for the male population, followed by a rate of 2.9 for San Francisco, and the same rate for the colored population of New Orleans. For the white male population of New Orleans the rate was 2.8, for Chicago 2.7, for Boston 2.6, and for Buffalo 2.0. Among the colored female population of New Orleans that rate was 1.8, while for the remainder of the cities the rate was less than 1 per 100,000.

A valuable discussion of the Roentgen ray in the diagnosis of tumors of the jaw, by Drs. New and Figi of Rochester, Minn., appeared in the *Journal of the American Medical Asseiation* for November 15, 1924. The authors conclude that "(1) a roentgenogram is of value in the diagnosis of certain types of tumors found only in the jaws, such as loentiasis ossium, solid odontomas and the cystic odontomas, including the adamantinomas.

(2) An expanding unilocular cyst-like tumor of the jaw may be a benign cyst, central carcinoma, endothelioma, giant cell tumor, fibroma, myxoma or cystic odontoma. The varying density and the presence of striae of bone may aid in differentiating these. (3) It may not be possible from the roentgenogram and clinical history to determine whether a condition is inflammatory, benign or malignant. Exploration and removal of tissue for frozen microscopic section should be made in questionable cases."

CANCER OF THE HEART

Cancer of the heart has been extremely rare, but curiously enough the only city reporting a rate as high as 0.8 per 100,000 is Buffalo, followed by San Francisco with a rate of 0.4 for the male population, while for the remainder of the cities the rate was 0.1 or less.

The rate for the female population varies likewise, the maximum having been reported for Buffalo with a rate of 0.4, followed by San Francisco with 0.3 and Chicago 0.2. These rates are based on so few deaths that they cannot be accepted as conclusive. The affliction in question is of very rare occurrence and the sex factor in question does not appear to be of special importance.

The rarity of cancer of the heart is well known. In the *Medical Press of Buenos Aires*, of May 30, 1925, as quoted in the *Journal of the American Medical Association*, eleven cases of tumors of the heart are dealt with by Drs. Cabred and Mosto. They mention that in 2,942 autopsies at the Johns Hopkins Hospital only ten cases of cancer of the heart were discovered and of these only one was primary. At the Berlin Institute, among 6,655 necropsies, only fifteen secondary carcinomas were found. They quote Aschoff to the effect that only one secondary carcinoma was found in 4,500 autopsies. In their own institute they discovered four secondary tumors in three necropsies during the last year and they have ten specimens in their museum. It is pointed out in this connection that whether primary or secondary, the tumors usually escape detection during life, as they induce no characteristic symptoms, the clinical picture blending with that of heart disease in general. Fibromas form the majority of tumors of the heart. They conclude that notwithstanding the heart is so seldom the seat of a tumor, yet single metastasis in this organ is comparatively frequent.

CANCER OF THE PANCREAS

Cancer of the pancreas is more common among the male than among the female population, but both sexes are liable to a measurable degree. The rate for the male population was highest for San Francisco, or 4.6, followed by the Chicago rate of 4.2, Boston 3.9, and Buffalo 3.2. The rate was lowest for the colored male population of New Orleans, or only 0.4.

The female rate was highest in Chicago, or 3.5, followed by Boston with a rate of 3.4, and Albany 1.7. It was lowest among the female colored

population of New Orleans, or 0.4. Throughout, the male rates are in excess of the female rates except for the colored population of New Orleans, where they are the same.

In the *Swiss Medical Review*, Geneva, March 10, 1925, it is said:

"Six cases of cancer in the body of the pancreas are reviewed. The first manifestations in all were attacks of pain, often with intense paroxysms, but sometimes a dull ache. Signs of compression of the abdominal aorta predominated in every case. The first to attract attention was the presence in the epigastric region of a small, firm, deep tumor, with marked pulsation. Bickel, Katzenelbogen and Mozer believe that this pancreas-aorta syndrome should be added to the pancreas-biliary syndrome and the pancreas-solar plexus syndrome; alone or combined with these it testifies to cancer in the body of the pancreas. The diagnosis in their cases had been aneurysm of the abdominal aorta, and no operation had been attempted. The course was usually from four to six months after the first onset of the pain."

Hastings Gilford quotes Mayo Robson, who has examined over 100 cancers of the pancreas, that it is "quite common to find in these cases evidence of pancreatitis superadded to the growth." He also quotes Borst, who records examples of cirrhosis in the pancreas with changes in the parenchyma of a kind chiefly resembling those seen in cirrhosis carcinomatosa of the liver.

Table H

CANCER OF THE PANCREAS

Rate per 100,000 of Population

	Male	Female	Excess of Male Rate
San Francisco	4.6	3.3	3.3
Chicago	4.2	3.5	0.7
Boston	3.9	3.4	0.5
Buffalo	3.2	1.2	2.0
Albany	3.0	1.7	1.3
New Orleans (white)	1.2	0.5	0.7
New Orleans (colored)	0.4	0.4	–

CANCER OF THE KIDNEYS

Cancer of the kidneys was more common among the male population, having prevailed at the rate of 3.1 for Chicago, while it was lowest among the colored population of New Orleans, or 0.4. The female rate was highest for Albany, or 2.1, while no deaths from this form of cancer occurred in Buffalo or among the colored population of New Orleans. Throughout, the rates for the male population are in excess of the rates for the female population.

Cancer of the kidney has been reviewed at some length in several contributions to the *Southern Medical Journal* of February, 1925, including an article by Hugh Cabot of the University of Michigan, Ann Arbor, Mich., and another by Dr. Hickey of the same institution. Attention is drawn to

the significance of pain as a diagnostic indication, but it is said that "a diagnosis of tumor based upon the character or location of the pain is not possible. In our series of cases pain was present in some form or other in about 78 per cent. and absent in 22 per cent. The pain was referred to the abdomen, lumbar region, back, loin, etc. In 32 cases, or 59 per cent., a palpable tumor was present; while no tumor could be felt in 39 per cent. The total number of cases in this series was 54. Secondary symptoms by frequency in 25 cases and nocturia in 20 cases. Constipation was present in 18 cases and a burning sensation in 11 cases, while urination was painful in 10 cases." The observations include some important data on blood pressure. Dr. Cabot mentioned the immediate mortality, which in the past had been high, while current statistics from the largest groups of cases show an operative mortality of something like 25 per cent. But he holds this to be probably too high. For under more favorable conditions he believes the mortality rate should not be much more than 10 per cent.

Dr. Hickey reviews the disease with reference to X-ray treatment, concluding, first, that changes suggestive of malignancy in the size and contour of the kidney can be usually satisfactorily shown by the X-ray; second, changes in the size, shape and contour of the pelvis and calices can be decisively shown in the usual pyelogram; third, metastic growths in the lungs and long bones are most easily found by the X-ray; and fourth, all these examinations can best be carried out by active and harmonious coöperation between the urologist and the roentgenologist.

The subject is also dealt with in an article in a review of a treatise on malignant disease of the kidneys, published in the *Cancer Library*, under the direction of Professors Hartman and Berard, who call attention to the relative frequency to which this affection is met with in early life, forming from 38 to 50 per cent. of all the tumors of infancy. The review concludes with the statement that "cancer of the kidney records after a nephrectomy in a proportion of 80 per cent; in 100 cases 22 died from the operation and of the 78 survivors there was rapid recurrence in 61, while in 16 only was there prolonged survival." With regard to carcinoma of the pelvis it is said that in 54 cases, in which 30 were operated upon, there was a rapid recurrence in the majority.

Table I

CANCER OF THE KIDNEYS

Rate per 100,000 Population

	Male	Female	Excess of Male Rate
Chicago	3.1	1.6	1.5
Albany	2.6	2.1	0.5
Boston	2.3	1.9	0.4
San Francisco	1.8	1.1	0.7
New Orleans (white)	1.4	1.2	0.2
Buffalo	0.4	–	0.4
New Orleans (colored)	0.4	–	0.4

CANCER OF THE BLADDER

Cancer of the bladder was most common in Chicago, prevailing among the male population at the rate of 7.7 per 100,000, followed by Boston with a rate of 7.2, the white population of New Orleans 6.5, and Albany with a rate of 4.8. The rate was lowest for the colored male population of New Orleans, or 3.3. For the female population the rate was highest for Albany, or 4.5, followed by Chicago with a rate of 4.0, and Buffalo with a rate of 3.6. The male rate for cancer of the bladder was in excess of the female rate in all the cities except Buffalo, where it was the same for both sexes.

Tumors involving the dome of the bladder have been reviewed by Dr. Albert J. Scholl of Los Angeles in the *Journal of the American Medical Association*, October 11, 1924. Regarding post-operative results, Dr. Scholl points out that tumors of the dome of the bladder are usually highly malignant and extensive. On the other hand they are readily resected, occur earlier in life than tumors of the base, and obstruction to the ureteral or bladder outlets is rare. Consequently, infection and destruction of renal function, which is so commonly the cause of death following resection of tumors of the base, is rare. Since the tumors occur in a comparatively symptomless area of the bladder, they grow large before operation is attempted. Nine of the twenty-eight patients for whom complete operative data were obtainable died. Dr. Corbus, in discussing the paper, declared himself absolutely opposed to the excision of any tumor whether benign or malignant, holding that diathermy was the greatest force that had been added to medicine and surgery in recent years.

Dr. Dakin takes occasion to say that in treating tumors of the bladder he was inclined to try the cautery, just as in surgery. Dr. Gardner was of the opinion that diathermy would be a great improvement over fulgeration. Dr. Bumpus of Rochester concluded by saying that the first objective of the paper had been "to emphasize the necessity for an improved classification; and the second, to obtain basic statistics that would serve as a yardstick with which we could measure the results accomplished by any specific methods of treatment. I do not think that surgery, which had an operative mortality in this series of 240 cases, or 11.2 per cent., should be abandoned when we find that of 196 patients traced, 105, or 53 per cent., are living, three over six years, nine over five years, fourteen over four years, and sixteen over three years. Until the final results of treatment by diathermy are shown to be superior to those of surgery, the latter surely should not be abandoned." The paper was apparently a joint contribution by Dr. Scholl and Dr. Bumpus. The latter, in the *Journal of the American Medical Association* for October 11, 1924, in discussion of modern methods and results in treating malignancy of the bladder, enlarges upon the discussion to great advantage. He deals separately with every important method of treatment, pointing out that in fulgeration employed in 84 of the 527 cases the following results had been observed:

"Recurrence was common even in low degrees of malignancy. It occurred once in sixteen cases, twice in four cases, three times in five cases, four times in three cases, six times in one case and seven times in one case, a total of 35 per cent. recurrence, agreeing with the earlier series reported by Braasch, of 27 per cent. With reference to the use of radium alone, or in conjunction with some other form of treatment which was employed in 212 cases, it is said that the average duration of life from the onset of the disease to the death of the patient was 2.85 years, or approximately the same as though no form of treatment had been used. With reference to the use of radium with cystostomy it is said that there was a mortality of 10.86, or approximately one-third higher than when cystostomy alone was employed; but the mortality following the latter procedure had been 7.69 per cent. The average length of life following the operation in six cases was but a few months longer than in those in which exploratory cystostomy was performed. Of the 29 patients who died, only four lived more than a year, and of the four living none had lived a year." He concluded by saying that if the tumor was too extensive to be removed surgically, it is evidently better not to employ radium, since the mortality was greater than the operative mortality, and the life of the patient is not lengthened.

I will pass over the use of the cautery and of the cautery and radium, and briefly refer only to surgery and radium. Seventy-eight patients were given radium besides having resection or excision. There were five operative deaths, a mortality of 6.41 per cent. In ten instances, the radium was applied with a cystoscope one or two weeks before operation. Two of the patients died shortly after operation. Radium was given to 25 patients during the operation or immediately following. There were three operative deaths. Twenty of the remaining 22 patients had been traced and thirteen had been dead on an average of one year after operation, seven were alive, and three of these had received radium emanations at the time of operation and in none had the malignancy recurred. The other four living patients had received radium immediately following operation. One has now lived five years since operation. The three other patients had lived approximately four years each.

Summarizing the foregoing he points out that of the 78 patients who had received radium, either before, during or after operation, 62 had been traced, of these 22, or 35.5 per cent., were alive, four having lived five years; seven, four years; four, more than three years; three, more than two years; and four, more than one year; the average being 3.42 years since operation. The total duration of life of the patients since the first symptoms averages 5.2 years, or more than twice that of the 75 patients who received no form of treatment.

Discussing the treatment by excision or resection he observes that "the most important factor with regard to prognosis is the degree of malignancy. 166 of the 196 patients treated surgically who were traced had tumors graded according to Broders as follows: 12 were of Grade 1 malignancy;

2 of these patients died in the hospital; 9 are living, and 1 is dead. 56 were of Grade 2 malignancy; 9 patients died following operation; 31 were alive, and 14 are dead. 73 were of Grade 3 malignancy; 10 patients died following operation; 27 are alive, and 37 are dead. 25 were of Grade 4 malignancy; 1 patient died at operation; 11 are living, and 13 are dead. If the patients are placed in two groups, there are 68 with a low grade of malignancy having a ratio of 40 living to 15 dead, or about 3 to 1, and there are 98 patients with high degrees of malignancy having a ratio of 38 living to 50 dead, or one to one and one third." Such ratios, he maintained, are irrefutable evidence that the degree of malignancy, as graded by Broders, mainly determines the results of any modern method of treating malignancy of the bladder.

Of special interest are papillomas of the bladder, some of which at least are directly related to certain occupations. I regret that on this occasion I cannot touch upon this interesting phase of the cancer question. As far as it is possible to judge, such forms of cancer are not as common in this country as in certain European countries. An interesting discussion on this question occurs in the London *Lancet* of September 12, 1925. In the *Periodical for Urology*, Leipsic, 1924, there is a discussion by Posner on Cancer of the Bladder in Aniline Workers, in which he mentioned the fact that workers who deal with aniline are more than others affected with cancer of the bladder, and that the first symptoms do not appear until many years after abandoning the occupation. He believes that aniline not only causes hematolysis but acts in some way directly on the bladder. Experimental research has been constantly negative, and metastasis of the bladder has never been reported as cancers. The subject is very briefly referred to in the Annual Report of the British Empire Cancer Campaign, published in 1925, according to which epithelioma of the urinary bladder is known to occur in workers in the dye factories in Germany. No cases have been reported up to date in England, though undoubtedly some must have occurred. The particular product which is active is not known. In an attempt to determine this we have applied various aniline products weekly to the skin of mice. Subcutaneous injection repeatedly in 127 mice has furnished a certain amount of evidence that there is a certain reaction to some of the vesicular epithelioma. An exhaustive study of the whole question was published by the International Labor Office in 1921, under the title "Cancer of the Bladder Among Workers in Aniline Factories," including a valuable bibliography. It concludes with the statement that "there is a close connection between a manipulation of certain amino compound products and the existence of tumor of the bladder. The number of cases of tumor of the bladder proved to have occurred among workers in contact with amino compounds is certainly small. It must, therefore, be concluded from this that the individual factor plays a great part in the pathology of the disease, as the patient constitutes a small minority. Action of long duration is necessary to produce tumors of the bladder. There is

no relation, however, between the occurrence and the duration of employment."

Of interest in this connection are the observations by Young and Scott, in the *New York Medical Record* of September 5, 1923, who reported on the basis of a review of 380 cases the results obtained by various methods of treating tumors of the bladder. Their observations show that about 80 per cent. of bladder tumors occur between ages 40 and 69. Both papilloma and carcinoma are much more frequent in the regions of the trigone, ureteral orifices, adjacent lateral walls of the bladder, and the internal urinary meatus. They consider that the prognosis of bladder tumors is now better than it was, for they think that now about 95 per cent. of benign and 75 per cent. of malignant pillomata, about 50 per cent. of popillary carcinomata, and almost 25 per cent. of infiltrating carcinomata, can be cured by one or more of the methods mentioned by them.

Table J

CANCER OF THE BLADDER

Rate per 100,000 Population

	Male	Female	Excess of Male Rate
Chicago	7.7	4.0	3.7
Boston	7.2	3.4	3.8
New Orleans (white)	6.5	2.1	4.4
Albany	4.8	4.5	0.3
San Francisco	4.6	2.3	2.3
Buffalo	3.6	3.6	–
New Orleans (colored)	3.3	1.4	1.9

CANCER OF THE LUNGS AND PLEURA

The rate for this form of cancer was highest for the male population of San Francisco, or 4.9, followed by Boston and the white male population of New Orleans with 3.8, and Chicago with 3.7. The rate for males was lowest for the colored population of New Orleans, or 0.4. For the female population the rate was highest in San Francisco, or 4.5, and lowest for the female colored population of New Orleans, 0.7. The rate for males was in excess of females for all the cities except for the colored population of New Orleans. The disparity in sex rates is not as pronounced as is generally assumed to be the case.

Table K

CANCER OF THE LUNGS AND PLEURA

Rate per 100,000 population

	Male	Female	Excess of Male Rate	Excess of Female Rate
San Francisco	4.9	4.5	0.4	–
Boston	3.8	3.9	–	0.1
New Orleans (white)	3.8	1.7	2.1	–
Chicago	3.7	1.9	1.8	–
Albany	3.3	1.7	1.6	–
Buffalo	2.4	1.6	0.8	–
New Orleans (colored)	0.4	0.7	–	0.3

CANCER OF THE SKIN

Cancer of the skin is comparatively rare in this country, but curiously enough the highest rate of frequency was for the male colored population of New Orleans, or 1.2, followed by San Francisco with a rate of 1.0. The rate for the white population of New Orleans was 0.9, Chicago 0.6, and Boston 0.4. There were no deaths from cancer of the skin reported for Albany and Buffalo.

For the female population the rate was highest for Boston 1.0 followed by Albany with 0.7, Chicago and San Francisco with a rate of 0.5, and the white population of New Orleans with a rate of 0.4. There were no deaths from cancer reported for the female population of Buffalo nor for the colored female population of New Orleans.

The wide variations in local incidence of cancer of the skin are suggestive. I hope to be able to consider this matter in detail in connection with the San Francisco investigation. No form of cancer is more easily subject to early operation, and yet the evidence is conclusive that there is frequently a long lamentable delay. It may also be said that probably no form of cancer is more subject to malpractice on the part of alleged cancer specialists using methods which have not the approval of qualified authorities. One of the best of recent contributions on external cancer is by Dr. Martin F. Engman of St. Louis (see *Journal American Medical Association*, January 10, 1925). Engman points out that the environmental conditions that influence the cycle of the cells to produce cancer occur in that decade of life when marked physical, nutritional and chemical changes begin in the skin. These first occur in the elastic and connective tissue elements and extend to the lymph and blood supply. Again, a potent change affecting the epithelial cells, usually in middle life, is brought about by various traumas of actinic, mechanical, chemical, and inflammatory origin. Chemical and histologic investigation has demonstrated a suggestive fact that changed physicochemical conditions surrounding the cell may induce that abnormal potentiality of growth called malignancy, and that these physicochemical conditions may in turn be induced by "life's wear or by various forms of trauma." Engman differentiates four types of epithereal cancer of the skin: (1) basal cell cancer or rodent ulcer; (2) prickle or squamous cell cancer; (3) nevo-carcinoma or melanoma; and (4) Paget's disease or dyskeratosis of Darier. Unfortunately the death classification of skin cancers does not take these details into account. In my own investigations I have been somewhat concerned with the influence of sunlight on skin cancer, particularly so after reading the elaborate treatise on the "Influence of Sunlight in the Production of Cancer of the Skin," by C. Norman Powell, published in London, 1918. It is suggestive in this connection that San Diego, which has probably the largest amount of sunshine throughout the year, has also the highest cancer death rate of any city in the United States, now exceeding 200 per 100,000. But my tropical investigations have failed to furnish the evidence that sunlight

exposure is particularly conducive to skin cancer, and I have made similar observations among the Indians of the southwest, who were almost constantly out in the open air and exposed to sunlight without hindrance. Before one can draw definite conclusions regarding skin cancer a thoroughly detailed study must be made of individual cases, particularly as regards rodent ulcers. The skin is subject to a large amount of irritation as well as traumas of more or less degree of severity. Yet, broadly speaking, skin cancers are not common excepting possibly in certain localities and certain occupations. According to Childer, the latest returns from the Mayo Clinic embracing the traceable results of 256 cases of cancer of the skin after operation, gives the following results. 16 of these were inoperable, but 250 were operated upon. Of these 141 had been traced, the remaining 109 had been lost sight of. Of the 141 that had been traced 68, or 48 per cent., are living, and of these, 56, that is 82 per cent., report a good result and have been free from the disease for an average of 7.44 years; 73 of these 141 cases, that is 52 per cent., are dead. Of these the cause of death was determined in 58, and of this number 38, or 66 per cent., died from a recurrence of the disease. By combining the good results of the patients who lived a considerable number of years without recurrence for an average period of 7.44 years, a total good result, or probable cure of 60 per cent., has been achieved. Childer also quotes Berlin statistics for cancer of the skin, according to which 76 per cent. had had no recurrence, or had meanwhile died of other diseases.

Morton has recently made an interesting report upon 29 cases of cancer of the skin concerning which there is a brief account in the *Journal of the American Medical Association* as follows:

"It is certain that a combination of surgery and radiotherapy is desirable in every case. The primary growth should be disposed of rapidly by electrocoagulation or cautery removal, thus eliminating one dangerous zone as a focus from which metastasis may occur. Squamous cell cancers of the scalp and forehead do not require removal of the regional glands; cancers of the face, cheek, eyelid, chin and nose, however, should have the glands removed also. Growths on the extremities and scrotum are prone to metastasize, and the regional glands are frequently involved. The squamous cell growths on the ear may metastasize to the parotid, preauricular or poseauricular glands or to glands of the neck. Whenever possible, cooperation between surgeon and radiotherapist will offer the best chance of bettering results."

CANCER OF THE BONES

Cancer of the bones, chiefly is not exclusively sarcomas, has not as yet been dealt with in matters of detail, but special consideration of sarcomata is in contemplation later. Reexamination of all the death certificates reporting deaths from cancer of the bone will be necessary to make sure as to what is strictly to be considered sarcoma and what may be classified otherwise.

Cancer of the bone occurs at the rate of 4.4 among the male population of Albany, followed by a rate of 3.9 for San Francisco, reaching a minimum rate of 0.8 for Buffalo. For the female population the rate was highest for the colored population of New Orleans, or 3.6, followed by a rate of 3.4 for Albany and Boston, and 3.2 for San Francisco. Sex differences in this form of affliction are not very pronounced.

No aspect of the cancer problem presents a more interesting aspect, at least statistically, than that of sarcoma. This form of cancer should always be clearly differentiated from carcinomas, both in death returns and institutional statistics. Thus far it has not been possible, however, to do so in my own investigations, but the matter will not be lost sight of in the future. I think it is generally held that the outcome of sarcoma cases is more likely to be fatal than in other forms of cancer. According to an analysis by Christiansen of 1000 cases of bone tumors collected from various sources, it is shown that of osteogenic sarcoma 58.7 per cent. occurred in the male and 41.3 occurred in the female. The highest age incidence for osteogenic sarcoma for both sexes was in the second decade of life, although more than 33 per cent. occurred after the thirtieth year. The epiphyses are not involved in at least 33 per cent. of osteogenic sarcomas at the diaphyseal ends of long bones. Both sexes are about equally affected with giant-cell tumors, namely, female 53 per cent., male 47 per cent. Giant-cell tumors are most common in the third decade of life, but 32 per cent. occurred after the thirtieth year. Myeloma is not a disease limited to adult life, for 39 per cent. of the cases occur before the twenty-first year. Benign angiomas must be considered in every diagnosis of a vascular tumor of the bone. Solitary diffuse endothelioma is not an uncommon tumor, especially in younger people. Predisposing sites for osteogenic tumors, benign and malignant, and giant-cell tumors, are at the ends of long bones, where there is an epiphyseal disk of maximum growth, where the growth is longest, and where the natural growth momentum is greatest.

Blumm has recently described two cases of sarcoma in children, age respectively four and one-half and eight years. In these cases radium treatment appeared to be checking the advance of the growth, at least for six months after operation. On the general subject of Roentgen ray treatment of sarcoma, Carvina reports the unusual findings in a lymphosarcoma in the mediastinum and neck of an elderly woman, two weeks after deep roentgen irradiation. The tumor showed numerous patches of necrosis of varying intensity, evidently proportional to the penetration of the rays. He compares this to similar cases on record, remarking that none seems to have been examined at such a brief interval after the exposure. A case of primary sarcoma of the stomach in a woman aged 38 had been reported by Kapel in a Danish medical journal. In this case "resection resulted in apparent recovery, until recurrence proved fatal the tenth month." It is also said in this connection that "up to 1917 resection had been made in sixty cases of sarcoma of the stomach with an operative mortality of 18

per cent.; in one case recovery is known for fifteen years, in another, nine years. Finally mention may be made of a case reported by Moise in 1924 of the occurrence of a sarcoma and carcinoma in the uterus of a patient aged 60. In his opinion the majority of authors appear to believe that a sarcoma is an older growth and that the sarcoma develops as the result of epithelial proliferation over the sarcoma." Finally on the general subject of Roentgen therapy of sarcoma of the orbit, Dr. Fowler of Philadelphia summarizes his conclusions as follows: "(1) Irradiation has shown improvement, but has been an ultimate failure in nearly all recurrent cases of sarcoma of the orbit. (2) Roentgenotherapy has been successful in the majority of primary sarcomas of the orbit. (3) Roentgenotherapy should be the method of choice in all primary sarcomas of the orbit. (4) When used early, roentgenotherapy has shown prompt results, and has done no harm to normal tissues. (5) A biopsy for diagnostic purposes does not seem justified. (6) Skill and general medical knowledge is of as much importance in radiotherapy as in surgery.

Table L

CANCER OF THE BONES

Rate per 100,000 Population

	Male	Female	Excess of Male Rate	Excess of Female Rate
Albany	4.4	3.4	1.0	–
San Francisco	3.9	3.2	0.7	–
Boston	3.3	3.4	–	0.1
New Orleans (colored)	3.3	3.6	–	0.3
Chicago	2.6	2.6	–	–
New Orleans (white)	1.9	2.9	–	1.0
Buffalo	0.8	–	0.8	–

All of the foregoing considerations have dealt with malignant tumors to which both sexes are liable. It now remains for me to discuss briefly the tumors peculiar to each sex. This however hardly applies to cancer of the breast, to which men are liable to a very slight degree, but it seems best to deal with this matter in the present discussion.

CANCER OF THE BREAST

No deaths from cancer of the breast among men, for illustration, were reported for Albany, Buffalo, Chicago or the colored population of New Orleans. For the white population of New Orleans the male mortality from cancer of the breast was only 0.1 per 100,000, while it was 0.2 for San Francisco. For the female population the rates have been as follows:

Table M

CANCER OF THE BREAST—FEMALE

	Rate per 100,000 Population
Albany	29.7
San Francisco	26.3
Boston	26.4
Chicago	19.9
New Orleans (colored)	18.8
New Orleans (white)	16.8
Buffalo	15.0

It is shown by the preceding table that the mortality from cancer of the breast was highest in Albany, or 29.7 per 100,000 of the female population, followed by San Francisco with a rate of 26.3, reaching a minimum of 15.0 in Buffalo. The rates for the white and colored female population of New Orleans are almost the same.

No phase of the cancer problem has probably received more extended consideration than cancer of the breast. The British Ministry of Health in 1924 published a special report on cancer of the breast and its surgical treatment, by Dr. Jane E. Lane Claypon, which contains a wealth of useful information which cannot unfortunately be conveniently summarized for the present purpose. It deals with every aspect of the problem and should be consulted by all who wish to secure a correct retrospect of the present and past situation. The facts are summed up as follows:

"1. After the older or incomplete operation, out of a net total of 7,029 patients, 2,956, or 42.1 per cent., were alive at the end of three years after operation.

"2. After the modern or complete operation, out of a net total of 8,921 patients, 3,857, or 43.2 per cent., were alive at the end of three years after operation.

"3. With the complete operation, the prognosis is intensively affected by the stage of the disease at which the patient is operated on. Thus: (*a*) If the disease is still local and no secondary growth has occurred, the percentage of survivors at three or more years after operation is from 65 to 80. (*b*) If secondary growths have already occurred, the percentage of survivors at three years after operation falls to 30 or less. (*c*) If the disease is very advanced, from 8 to 9 per cent. survive only as long as three years after operation.

"4. The expectation of life after the onset of cancer of the breast when the disease runs its own course, may be taken as being, on an average, not more than three and one-half years.

"5. In the aggregate, *i. e.*, without reference to the stage of the disease at operation—the effect of complete operation is to prolong life, increasing the expectation of life from the onset of the disease by from two to three years.

"6. In patients operated on by the complete operation, while the disease is still local, the expectation of life from the onset of the disease may be, on the average, as much as ten years more than in the case of persons not operated on."

With reference to the actual periods alleged to have lapsed between noticing the growth and application of treatment, it appears that out of 1,817 cases 50 had a duration of more than five years, and 43 per cent. of all the patients had noticed the growth for a longer period than one year. It is pointed out in this connection that "where every day is of importance, the loss of so long a period as one year is deplorable." Cancer of the breast, like cancer of the skin, is one of the organs or parts of the body most amenable to early treatment. Yet it has been the experience, in this country at least, that there is more delay in cancer of the breast than in many other forms of cancer. The British report considers such questions as the age of the patient coming for treatment, age and results, occupations pursued by patients suffering from cancer of the breast, the relation of child-bearing to breast, the relation to breast-feeding to its incidence, and many other matters which, as I have said before, cannot be summarized for the present purpose. An exceedingly valuable discussion of every phase of the subject is contained in Duncan C. L. Fitzwilliam's treatise on the "Breast," published in St. Louis, 1924. On the question of prognosis and operative mortality, Fitzwilliams remarks that "one would expect, with the recent extensions of this operation, immense extent of the wound surface, and the nearness to the trunk, that the mortality might well be considerable. It is surprising to find, therefore, that it is almost negligible. Rodman gives it as one per cent. in 2,133 cases operated upon by twenty-one different surgeons. In Judd's series of 609 cases the mortality was five per cent., and in no case was shock the cause of the death." In his own records there was only one fatal case.

With particular reference to prognosis he observes: "Carcinoma of the breast, if left untreated, generally causes death within three years of the time it is first diagnosed." He points out that "in the majority of cases it could, might, and should have been diagnosed at least a year earlier, and if operated upon at that time the disease could have been eradicated totally in about 75 per cent. of the cases." In a general way, he states that "the operation has become more and more thorough and at the same time more extensive, until now it has reached its limits and has even receded in extent from the operation at one time advocated by Halstead, namely, clearing out the supraclavicular glands in all cases, a procedure which is now recognized as unnecessary in every case. With each advance there has been a slightly better outlook for the patient, until matters have come to a standstill, and it is probable that no very great advance can be made by means of operation, and we return again to what has already been stated—that a better prognosis can now only be brought about by earlier diagnosis."

An excellent report on tumors of the breast was presented to the New York Surgical Society in 1922 by Peck and White, who considered 331 cases of tumor of the breast, of which 136 were benign and 195 malignant. Of the malignant cases follow-up reports were obtained for 118 patients. Of these 59 were dead or alive at recurrence, 53 were alive at the present time, while 27 of the latter had passed the five-year mark. There were six post-operative deaths while the patients were still in the hospital. The authors point out that the history of the length of time the tumor had been observed has been found to be of little help and that the same has been said of the lack of retracted nipples, adhesions to the superficial or deeper tissues, palpable axillary lymph-nodes, pain and tenderness or history of trauma. Presence of retracted nipples and adhesions to the superficial tissue, as shown by the orange-peel appearance, on the contrary, are of great help. Axillary nodes are often palpable in benign tumors and often not palpable in malignant tumors. The sense of hardness is often of some help, while multiple primary nodules rather point toward a benign condition, but not absolutely so. They had found no case of malignant tumor in a patient under 25 years of age, but say that in the presence of absolute signs they would not hesitate to do a radical operation in a young woman under that age. Of the 195 cases, 57 had retracted nipples, 16 had ulcerated skin areas, 94 cases showed adhesion to the skin, 31 cases showed adhesion to deep muscles, 9 cases showed multiple nodules, 77 cases showed palpable axillary nodes, 109 cases showed axillary nodes involved at the time of operation, 70 cases had lactated previously, 68 cases had not lactated previously, 15 cases gave a history of previous trauma, and 15 cases complained of pain and tenderness. There was only one male in the series under review.

Regarding the type of disease it is said that 78 cases were classed adenocarcinoma, 53 cases as scirrhous carcinoma, 58 cases as medullary carcinoma, two cases as Paget's disease, and four cases as sarcoma. Of the 59 cases traced which died or had recurrence 48 cases had axillary glands involved at the time of operation while 11 cases had no axillary gland involvement. Of the 53 cases now alive and well, 17 cases had axillary glands involved, but 10 of these had been well more than five years; 36 cases had no axillary involvement, and of these 17 were well more than five years. They add definite information concerning 69 cases operated upon more than five years ago. Of these 42 were dead and 27 alive. They, therefore, conclude with the statement that a study of this group shows that their percentages correspond closely with those by Sistrunk and McCarty in the *Annals of Surgery* for January, 1922. Of their 69 cases 39 per cent. were alive and well more than five years, of cases of metastases 23 per cent. were alive and well more than five years, but of cases without metastases 65 per cent. were alive and well more than five years.

To the foregoing add some recent statements by Haggard and Douglas of Nashville, Tenn., reported in the *Journal of the American Medical Asso-*

ciation for February, 1923, representing 255 histories of breast lesions covering a period of 11 years. Their findings are summarized in the following statement.

"(1) No malignant tumor of the breast occurred in a woman under 27.

"(2) The average age of patients with cancer of the breast was 49.2 years.

"(3) In cases of recurrent carcinoma, the patients were five years younger than in the primary cases.

"(4) All sarcomas occurred in males, and constituted 2.4 per cent of the malignant cases.

"(5) In only one-third of the malignant cases was there a family history of the cancer.

"(6) In two-thirds of the cases in which the lesions were benign the patients gave a positive family history for cancer which probably caused them to apply for examination even though their lesions were benign.

"(7) The average duration of cancer before operation was 26½ months.

"(8) One case in five was inoperable.

"(9) Patients with benign lesions had an average age of 36.1 years, which was thirteen years younger than in the malignant cases.

"(10) The average duration was fourteen months, as against 26.8 months for carcinoma cases.

"(11) From five to ten year cures in 111 traced cases of operations for cancer of the breast occurred in 45.7 per cent.

"(12) The preventable surgical mortality was 0.8 per cent."

Regarding the rarity of cancer in men, a statement may be quoted from the Polyclinic of Rome, to the effect that five cases of male breast cancer had been observed in 320 cases of mammary cancer in the public hospital at Venice. The age of these cases range from 56 to 80 years.

For this country the most useful summary of the results on cancer operations have been presented by Dr. Robert B. Greenough of Boston, in the Section of Surgery published in the *Southern Medical Journal*, March, 1925. The general conclusions by Dr. Greenough are summarized in the following statement:

"The results are not so favorable as could be desired, but they appear to show that X-ray as it was then given at that hospital in prophylaxis against recurrence after radical operation was of relatively little value; and that the earlier the disease is discovered and the more extensive the operation for radical cure the better the results. A certain small proportion of cases of breast cancer are probably from the beginning of so malignant a type that our present methods of treatment are quite inadequate to cope with them; but the majority of cases are more favorable and can be cured if only they can be discovered and given radical surgical treatment in the early and favorable stages of the disease."

I may also point out that the average duration of the disease as far as known was 7.5 months, 39 cases with a duration of over 7.5 months and 26 per cent. cures, while 52 cases with a duration of less than 7.5 months yielded only 23 per cent. cures. The difference, however, is not sufficiently striking to justify far-reaching conclusions.

CANCER OF THE UTERUS

Cancer of the uterus shows the highest incidence among the colored population of New Orleans, where the rate reached 52.9 per 100,000. This rate, however, is not in strict conformity to the known facts regarding the present-day exceptional liability of colored women to uterine fibroids as well as uterine malignant diseases.

The next highest rate prevails in Albany, or 33.8 per 100,000, followed by San Francisco with a rate of 33.7 and the white population of New Orleans with a rate of 32.0. For Boston the rate was 30.7, for Chicago 26.0, and for Buffalo 20.6.

It is regrettable that the mortality returns for cancer of the uterus should not differentiate cancer of the cervix and cancer of the fundus, for the two affections are unquestionably due to different causative conditions demanding special consideration. Scholten and Voltz report the results of radium and Roentgen treatment of patients with gynecologic cancer as follows:

"Doderlein has not been operating for uterine cancer since 1912. Of the 313 carcinomas of the cervix admitted to the clinic in 1918 and 1919, forty-two were absolutely hopeless. The rest were irradiated. Of the total, 12.4 per cent. are healthy after five years of observation—that is, 14.3 per cent. of those who were treated. Of the 37 patients who were operable, 16 are cured. Of the other cancers, the best results were obtained in cancer of the body of the uterus; 7 have survived out of 13 patients. They are confident that these results will be still further improved by certain changes in the technic introduced lately. They irradiate the pituitary region, and observed a lower mortality and marked increase in weight. The production of rays has been also improved, and the irradiation is done in a closed chamber so that the patient breathes pure air."

Heusinkveld has reported a case of a young unmarried woman of 20 who had a typical carcinoma of the glandular portion of the cervix. She died five years after operation. An important contribution to statistical uterine operation was contributed to the *Journal of the American Medical Association* under date of August, 1925, having reference to results presented to the Vienna Medical Society in regard to 1,500 cases of cancer, in which the Wertheim operation had been employed. Of 87 incipient cases 98 per cent. survived the operation, of 53 mild cases 61 per cent., of 28 severe cases 34 per cent., and of 14 very severe cases 19 per cent. Only 51 per cent. of all the cases were operable. The primary operative mortality was

steadily reduced from 16 per cent. in the first 1,000 cases to 8 per cent. in the next 500 cases, or at present in the incipient cases it is only 3 per cent. It is pointed out that statistics show that cancer of the cervix in young married women has no worse prognosis than formerly. The conclusion is to the effect that the value of the abdominal radical operation for carcinoma of the cervix is now definitely established. No marked improvement in the percentage of cures can be expected. The primary operative mortality, however, may be further reduced. It is to be assumed that the term "cure" means a period of five years, although this is not stated in the account referred to.

One of the most important of the recent contributions to cancer of the cervix is by Sidney Forsbach, published in the *British Medical Journal* of July 19, 1924. He observes that "it is a curious fact that cancer of the womb is very largely a disease of the hospital class of patient, who have large families and are more prone to suffer from neglected infections than the well-to-do class. In addition to which, environment, malnutrition, and alcoholism play no small part in depriving the organism of the natural power of resistance." In 200 cases of cancer of the cervix there was no evidence of hereditary influence. The incidence of nulliparous women was 12 per cent. Twenty-seven of these cases had undergone some form of operation. Reference is made to early cases, it being stated that "if surgery were limited to them the operative mortality would be as low as 6 to 7 per cent., and a curability rate of 70 to 75 per cent. of operated cases would probably be obtained." Borderline cases, where one or both broad ligaments are infiltrated and there is some fixation of the uterus, and where the growth may involve the vaginal wall or the patient may have a persistent frequency of micturition, are reviewed at some length as follows:

"Baum: Of 81 borderline cases 29 per cent., and of 127 advanced cases 7 per cent., were free five years later.

"Doderlein: Of borderline cases 36 per cent., and of advanced cases 11 per cent., were free five years later.

"Kelly, who classifies these two groups as inoperable, had 69 cases (21 per cent.) free from disease, 7 of which were for five years and over.

"Heyman: Of 26 inoperable cases, 7 (27 per cent.) were free five years later.

"Adler: Of 52 inoperable cases, 13 (25 per cent.) were free five years later.

"Van Seuffert: Of 62 inoperable cases, 14 (22.6 per cent.) were free five years later.

"Burrows: Of 100 inoperable cases, 6 (6 per cent.) were free from three and a half to four years later."

There is extended discussion of treatment by radiation and post-operative radiation which cannot be reviewed to advantage with the re-

quired brevity. It is said however that, clinically, radium is suitable for 90 per cent. of the advanced cases. With particular reference to 50 cases of cancer of the cervix treated by radium and colloidal copper, it is said that out of 50 cases 38 were dead and 12 are living. All the 12 living are well and free from symptoms of recurrence. The duration of observed post-radiation results have been from about three years to nine months. The entire discussion is summarized in the following statement:

"1. That for cases of carcinoma clinically limited to the cervix the only treatment is operative;

"2. That for cases which have clinically invaded the pericervical tissues the treatment is by radium to the cervix and X-rays to the pelvic tissues;

"3. That salts of copper play an important though subsidiary part in treatment by radium;

"4. That pre- and post-operative irradiation is of considerable value."

Another important contribution to the subject is a paper on "End Results of the Treatment of Cervical Carcinoma with Radium and Roentgen Rays," by Dr. Henry Schmitz, Chicago. Regarding an experience, during 1914-1923, of 450 patients with carcimona of the uterine cervix, 345 of these had primary carcinoma and 104 had a recurrence. Of 450 cases 41.5 per cent. occurred between 46 and 55 years of age. The number of women who had been sterile was 14.8 per cent. in cases of cancer of the cervix, against 18.3 per cent. for the general population. Cases of primiparas formed 19.5 per cent. in cancer of the cervix against 14 per cent. in the general population. It is, therefore, said that "the incidence of the number of pregnancies has been of especial interest. The generally accepted fact that women with many children have cervical carcinoma more frequently than women with few or no children is not borne out by our observations." There is also the following interesting observation regarding cancer of the uterus among Jews, but they are not based on recent observations of the Jewish population in this country:

"Considering the significance of the most prominent symptoms of cancer of the cervix it was found that in 61.5 per cent. there has been hemorrhage and in 14.7 per cent. discharge, while pain was present in 20.1 per cent. of the cases and loss of weight had been observed in two per cent. End results are reported as follows: The percentage of cures for the three-year period are 21 per cent. for the 175 primary cases and nine per cent. for the 75 recurrent cases. Collective statistics for the surgical treatment of cervical carcinomas based on the same method of procedure as that employed in those for radiation treatment show permanent cures of about 25 per cent." To test this conclusion the authors present some collective statistics of five-year cures for cervical carcinoma treated with radium or with radium and X-ray representing 1,480 cases, of whom 14.2 per cent.

were living after five years. A larger proportion was reported by Kehrer, or 27.8 per cent., using radium alone. The percentage operability and relative and absolute curability of cervical carcinomas for different methods of treatment are summarized in another table as follows: Radium only, Clark 8.6 per cent., Bailey and Healy 9.2 per cent., Kehrer 27.8 per cent., radium and Roentgen rays, Doderlein 13.2 per cent., Baisch 14.1 per cent., and Schmitz 14.6 per cent; surgery only, Johns Hopkins 26.6 per cent., Stoeckel 26.6 per cent., and Graves 18.5 per cent. The general observations are summarized in the statement that, "radium and X-ray are very efficient agents when judiciously applied either alone or in a very selected group in combination with surgery; (2) the first examining physician must realize his responsibility in immediately restoring these patients to health. All irregular menstrual phenomena and vaginal discharge, regardless of its character and the age of the patient, demand a most careful examination in order to determine the cause. In the early cases we have a definite procedure to offer both patient and surgeon."

An extremely valuable discussion of carcinoma of the cervical uterus including a review of 100 cases with a special reference to predominating type of cell by Pomeroy and Strauss, reported in the *Journal of the American Medical Association* for October 4, 1924. The address is suggestive of a great practical value of determining accurately the degree of malignancy with reference to results of different methods of treatment.

The relative proportion of cancer of the uterus, or, respectively, of the fundus and of the cervix, is indicated in a paper by Frankl, reported in the *British Medical Journal* of August 29, 1925. The results are based on experience in Gynaecology between 1908 and 1923. There were 1,878 cases of myoma and 45 of sarcoma. Out of 1,036 cases of carcinoma, 919 were of the cervix and 117 of the body of the uterus. In 72 cases myoma and carcinoma existed concurrently, 62 being cervical cancers and 10 cases of cancer of the body.

The foregoing is amplified by an expression by Davis in the *Annals of Surgery* for July, 1925. With particular reference to carcinoma of the body of the uterus, David points out, "the growth usually appears as papillary or polypoid outgrowths into the cavity, causing some enlargement of the uterus; it tends to invade the body of the uterus and serosa, with secondary involvement of the ovaries and tubes. The average age of the patients was 54, and nearly 70 per cent. had passed the menopause over a year. The chief symptoms were hemorrhage and discharge, frequently accompanied by colicky pains; he states that these symptoms occurring after the menopause are pathognomonic of the condition." A collective review of the recent literature on the treatment of cancer of the cervix and the question of radium operation was published in the *American Medical Journal* on "Obstetrics and Gynaecology," for July, 1925.

In this country it is pointed out that primary operative mortality ranges from 8 to 20 per cent. against 5 to 11 per cent. for Europe. Pollock con-

siders 10 per cent. a fair average in the hands of competent surgeons. Thirty per cent. of cures after each five-year period is about all that can be claimed for the radical operation, even by the best American surgeons. He considers it unfair to superficially compare operable results.

For example, he states that "of 100 cases of cancer of the cervix applying for operative treatment, at most only 50 can be accepted as operable and five will die of the operation, so that out of 45 survivors after operation about 14 can be expected to survive the five-year period. Consequently only 14 are alive at the end of the five years. *With radium, however, all of the 100 cases will be accepted for treatment, and of this number you can expect at least 95 to be alive at the end of five years with practically no mortality.* He quotes from an address by Ward before the American Association, 1925, reporting upon all cases of cancer in stages which have received radium treatment at the Women's Hospital, including both the operable and inoperable cases, showing 25.9 per cent. to be living at the end of the five years, while out of the operable 52 per cent. were alive after five years. He therefore admits that radium alone or in conjunction with X-ray therapy is a measure which is now expected for the complete and permanent cure of cervical cancer, and that there is sufficient accumulative evidence to show that this treatment has been entirely satisfactory.

Table N

CANCER OF THE UTERUS—FEMALE

	Rate per 100,000 Population
New Orleans (colored)	52.9
Albany	33.8
San Francisco	33.7
New Orleans (white)	32.0
Boston	30.7
Chicago	26.0
Buffalo	20.6

CANCER OF THE OVARIES

Cancer of the ovaries exists to the extent of 5.5 per 100,000 for Albany, followed by a rate of 5.0 for Boston, 3.6 for San Francisco, and 3.5 for Chicago. The rate for the colored population of New Orleans was 2.9, Buffalo 2.8, and for the white population of New Orleans 2.4.

Ovarian cancers on the basis of British statistics are stated to be much more common among the unmarried than among the married. The facts revealed in this respect by my investigation on the basis of living cancer patients are not yet available for discussion. Hastings Gilford, referring to this subject, points out that "according to official returns for England and Wales, up to the age of 45 cancer of the breast is as common among the married as it is among the single, but after that age the single suffer more than the married by as much as 45 per cent. So also deaths from cancer of the ovaries are twice as frequent among the unmarried. On the

other hand, deaths from cancer of the uterus among the married are 73 per cent. more than among the single. But in this case too it is the mortality of the single which increases relatively to that of the married with the advance of age. The usual and most likely explanation is that cancer of the uterus is much more common among the married because of the greater exposure of the neck of the uterus to injury during child-birth, and afterwards to septic infection. But apart from this increased incidental liability of the married, all the statistics point to a greater total liability of the unmarried. Stevenson has pointed out that, owing in part to the falling birth-rate, the mortality from cancer of the breast is rapidly increasing, while that from cancer of the uterus is diminishing, for "it would appear that child-bearing increases the risk of uterine, and diminishes that of the mammary cancer, and it is therefore only to be expected that the present decrease in fertility should be accompanied by an increase in mammary but not in uterine cancer."

Hastings Gilford quotes Deelman, who has given particular attention to this subject in Holland, to the effect that "among 601 women with uterine cancer, 571 were married and 30 unmarried. Of 48 cases of cancer of the body of the uterus 31 per cent. were mulliparae, and the others averaged only 2.8 children each. Of 553 women with cervical cancer, only 5.2 were mulliparae, and the rest averaged five children each. Hence there were six times more nulliparous women among those with fundal cancer than among those with cervical cancer." There is possibly no more important phase of the cancer problem as it concerns women than in these discussions of cancer of the female generative organs in their possible relation to child-bearing and birth control. Unfortunately most of the evidence is as yet fragmentary, while much of it is contradictory and inconclusive. The subject is complicated by non-malignant ovarian tumors, which may vary from 0.5 to 30 cm. in diameter. In these, of course, malignant degeneration may occur.

Cameron, in a paper on malignant disease of the ovaries and fallopian tubes, reported in the *British Medical Journal*, August 29, 1925, gives the youngest case of carcinoma of the ovaries as having been 19 years of age. But Potter has reported a patient as young as 18 years of age. In this case a tentative diagnosis of appendix abscess had been made. When operated on a solid tumor was found, growing from the left ovary, extending to and enveloping the right. On microscopical examination the tumor proved to be sphereoidal-celled carcinoma. On the other hand, cases of malignant ovarian tumors have been reported in the aged.

In my series of San Francisco cases I find that the youngest death from cancer of the ovaries was 24 while the oldest was 71, and for all of the 37 cases the average age at death was 51 years. In 16 cases for Albany, N. Y., the youngest age was 42 and the oldest 73, while the average age was 57.9. In 18 deaths from cancer of the ovaries for the white population of New Orleans the youngest age was 24 and the oldest 75, while the average age

was only 44.8 years. In eight deaths of cancer of the ovaries in the colored population of New Orleans the youngest was 30 years of age, the oldest 52, while the average age at death was 40.5 years.

According to Hastings Gilford, "of the results of surgical operations on ovarian cancers, the newest figures are those of Schafer of Berlin. Among 99 women operated upon from five to ten years before his paper was written, 13.3 per cent. have had no recurrence; 64 per cent. of these cancers were bilateral, seven were metastatic to stomach cancers, and nine to uterine."

Table O

CANCER OF THE OVARIES—FEMALE

	Rate per 100,000 Population
Albany	5.5
Boston	5.0
San Francisco	3.6
Chicago	3.5
New Orleans (colored)	2.9
Buffalo	2.8
New Orleans (white)	2.4

CANCER OF THE VULVA AND VAGINA

Cancer of the vulva and vagina prevailed at the rate of 1.4 per 100,000 among the female population of Boston, 1.1 among the colored female population of New Orleans, 0.9 among the white population of New Orleans, 0.8 in Buffalo and Chicago, and 0.6 in San Francisco, while no deaths from this affliction were reported for Albany.

For the male population the one form of cancer above all others peculiar to the sex is cancer of the prostate. The rate was highest for Albany, or 13.0 per 100,000, followed by San Francisco with a rate of 9.1, Boston 7.8, Chicago 6.3, the white population of New Orleans 6.1, Buffalo 5.9, and the colored population of New Orleans 1.6.

Cancers of the vagina and vulva are relatively rare. In my San Francisco series of cases I find that there were seven deaths during the four years ending with 1923, ranging in age from 37 to 74 years with an average age of 58.9 years. There were no cases of this type in my Albany investigation, representing 398 deaths from cancer among women during the five years ending with 1923. In my New Orleans investigation among the white population there were seven deaths of cancer of the vagina and vulva ranging from 30 to 71 years of age and having an average age of 54.3 years. There were only three deaths among colored women dying at an average age of 48.7 years. Referring to the results of Bunn's experience with 400 cancers of the reproductive organs treated by operation or by mesothorium or radium between 1913-1915, Hastings Gilford states with reference to cancer of the vagina that 22 per cent. were cured, quoting Bunn to the effect that "he advises operation in cancer of the breast, vulva, ovary and fundus uteri, followed by radiation, and radiation only in

cancers of the vagina and urethra, and also in cancers of the cervix, if early and the patient is in good condition."

He also refers to the precancerous condition of the vulva, but it being chiefly complicated by leukoplakia. Radium in such cases, he observes, is sometimes effective.

CANCER OF THE PROSTATE

In a discussion of the blocking of the lymphatics in the control of carconoma of the prostate gland, Dr. Robert H. Herbst, in the *Journal of the American Medical Association* for May 7, 1924, takes occasion to remark that "we do not know any more about the cause of cancer of the prostate than we do about cancer occurring in other organs. We do know, however, that at least 20 per cent. of all neoplasms of this gland are malignant." He refers to results obtained by Thomas and Pfahler, who handled bladder and prostatic cancer by a combination of surgical care, electro-coagulation, radium exposure and Roentgen-ray treatments. Following a review of literature supplemented by his own, Dr. Herbst concludes that the treatment of carcinoma of the prostate resolves itself into a consideration of the following problems:

(1) The control of cancer; (2) the relief of urinary retention; and (3) the obtaining of the best possible function after the cancer has been controlled. Herbst also observes "that the failure to control the disease in the past has been due, at least in some instances, to the haphazard introduction or application of radium to the malignant prostate. A knowledge of the lymphatic circulation, together with the establishment of good drainage of the urinary tract is essential to success in the control of the disease. Accuracy, coupled with attention to detail, is as important in the control of cancer of the prostate as in any other surgical procedure.

An important discussion on the incidence of malignant disease in the apparently benign and enlargement of the prostate, by Dr. R. H. Joslin Swan, reported in the *Lancet* of November 3, 1923, includes the tabulation of prostates removed by operation during the last ten years and submitted for pathological examination. Out of 678 cases 25.7 per cent. were definitely malignant, 8.6 per cent. borderline cases, apparently precancerous, 65.3 per cent. were innocent adenomas, and 0.4 per cent. were tuberculosis. He also quotes Dr. H. Wade of Edinborough, who in 1914, had found in 134 specimens of enlarged prostates that 14 were carcinomatas. He implies that malignant conditions are more common than generally observed. Combining results from different sources aggregating 262 cases, malignant disease was found present in apparent enlargement in 34 cases, of 12.9 per cent.

Hastings Gilford observes in this connection that the organ peculiarly liable to senile hyperplasia which occasionally undergoes further change into cancer is a prostate gland. He quotes Hertzler to the effect that "the

appearance of the senile enlarged prostate and its change into malignancy 'closely resemble those of parenchymatous hypertrophy of the female breast, and the same precautions are necessary in arriving at a conclusion' as to the occurrence of cancer." He also quotes Ewing, who, after referring to the myomas and adenoma-like formations which may grow in the degenerated tissue of enlarged prostates, writes that "the alveoli sometimes becomes filled with typical large or small hyperchromatic cells and in this way carcinomas are found. Such adenocarcinomas occur in so-called hypertrophied prostates of elderly men to an extent which is variously estimated at from 5 per cent. to 14 per cent." The average age at death in cancer of the prostate in my San Francisco cases was 64.2 years, ranging however from 32 to 82 years. This average is based on 107 deaths. In my Albany cases of 35 deaths from cancer of the prostate the average age at death was 68.6 years, ranging from 46.8. The disease was relatively much less common among the white population of New Orleans, where there occurred 45 deaths during the period under observation, at an average age of 66.8 years, ranging from 37 to 79 years. The disease was decidedly increasing among the colored population of New Orleans, there having been four deaths, at an average age of 68.2 years.

MALE GENERATIVE ORGANS

Cancer of the male generative organs has been very rare in all of the cities under review. For Boston the rate was 1.2 and for San Francisco the same, for Albany the rate was 1.1, for Buffalo 0.4, for Chicago 0.9, for the white population of New Orleans 0.6, for the colored population of New Orleans 2.8. A new significant fact brought out is the much greater liability of the colored male population to cancer of the generative organs than the white population. It is quite probable that further investigations will reveal a similar increased liability on the part of Orientals. The number of deaths involved at the present time do not justify definite conclusions.

RACIAL FACTOR IN NEW ORLEANS

The foregoing rather extended considerations clearly emphasize the differential liability of the two sexes, proving conclusively that for most forms of cancer not peculiar to the sex the rate is higher for the male than for the female population, while for most important forms of cancer the rate is highest for San Francisco.

Since the race factor is somewhat obscured in the preceding statements, essential facts of the situation may be briefly reviewed.

For New Orleans the male rate for the white population for all forms of cancer is 106.0 per 100,000, while the colored rate is 79.8. For females, however, the rate for the white population was 119.0, while for the colored population it was 126.4.

For cancer of the stomach the white male rate was 27.3 and the colored rate 29.0. The white female rate was 18.8 and the colored rate 18.9. In

other words, cancer of the stomach prevailed at almost precisely the same rate among each sex irrespective of race.

Cancer of the liver and gall-bladder prevailed at the rate of 9.3 among the white population, against a rate of 12.7 for the colored. The white female rate was 11.3 and the colored rate only 5.7.

Cancer of the mesentery and peritoneum prevailed at the rate of 0.9 among the white male population while the colored rate was 1.2. For the female population the rate was 1.9 for the whites and 1.1 for the colored.

Cancer of the intestines prevailed at the rate of 5.4 among the white population and 5.3 among the colored, while among the female population the rate was as high as 8.0 among the whites, against 5.4 among the colored.

Cancer of the rectum and anus prevailed at the rate of 2.0 among the white male population and 4.0 among the colored. There was likewise a marked excess among the females for this form of cancer, the rate having been 3.9 for whites and 8.2 for the colored.

Cancer of the oesophagus prevailed at the rate of 3.2 for the white male population and only 0.4 for the colored. The rate for the white female population was 0.5, and there have seen no deaths from this cause among the colored.

Cancer of the skin prevailed at the rate of 0.9 among the white male population and 1.2 among the colored. The rate among the white female population was 0.4, and there have been no deaths from this cause among the colored.

Cancer of the lungs and pleura prevailed at the rate of 3.8 among the white male population and 0.4 among the colored. The rate for the white female population was 1.7 and 0.7 for the colored. Cancer of the lungs and pleura was decidedly more common among the whites than among the colored.

Cancer of the pancreas prevailed at a rate of 1.2 among the white males and 0.4 among the colored. The rate for the white females is 0.5 and for the colored females 0.4.

Cancer of the kidneys prevailed at the rate of 1.4 among the white male population and 0.4 for the colored population. The white female rate was 1.2, while there were no deaths from this affliction among the colored.

Cancer of the bladder prevailed at the rate of 6.5 among the white male population and 6.3 among the colored. The rate for the white female population was 2.1 and 1.4 among the colored.

It is thus shown that cancer of the pancreas, kidneys and the bladder was decidedly more common among the white population than among the colored.

Cancer of the bones prevailed at the rate of 1.9 among the white population while the rate was 3.3 for the colored population. For females the rate was 2.9 for the white population and 3.6 for the colored. This type

of disease therefore prevails decidedly more among the colored than among the whites.

Cancer of the uterus prevailed at a rate of 32.0 among the white population against 52.9 for the colored. This is unquestionably the most pronounced racial difference among the various forms of cancerous afflictions.

Cancer of the ovaries occurred at the rate of 2.4 among whites and 2.9 among the colored population.

Cancer of the vulva and vagina occurred at the rate of 0.9 among the white and 1.1 among the colored population.

Cancer of the female breast occurred at the rate of 16.8 among the white and 18.8 among the colored population.

Cancer of the prostate prevailed at the rate of 6.1 among the white male population, against a rate of 1.6 for colored males. These rates show that this form of cancer is decidedly more common among the white population.

Cancer of the male generative organs prevailed at the rate of 0.6 among the white population and 2.8 among the colored. This form of disease is also more common among the colored at the present time than among the whites. It should perhaps have been pointed out in this connection that the foregoing contrasts of sexual and racial differences in cancer liability are based on the following number of actual deaths thus far concerned in the investigation. The total number of certificates was 9,592. Of this number 840 were from Albany, N. Y.; 405 from Buffalo; 3,163 from Chicago; 681 for the white population of New Orleans; 549 for the colored population of New Orleans; and 3,294 for San Francisco.

It has been my intention to review some further aspects on the cancer problem as revealed by the San Francisco cancer survey, but it is reserved for some future occasion. The survey at the present time includes nearly 20,000 death certificates, and the outlook is that by the end of 1926 nearly 30,000 certificates will have been dealt with. Nor have I been able at the present time to review the material collected by means of questionnaires, of which approximately 2,000 have now been returned to me. I have found this method of exceptional value, though much depends upon the continuity of my efforts to enlarge the plan and scope of the investigation to make it representative for both this country and Canada.

In conclusion I may add that I purpose in the near future to consider with reasonable thoroughness the cancer problem in the Republic of Mexico, with particular reference to occurrence of malignant diseases among different racial elements in different parts of the republic. It is possible that this investigation may be extended to Guatemala and British Honduras. For the time being I am merely presenting the statistical results of my investigations which aim at the collective impartial presentation of available cancer facts. Only those who have for many years been concerned with investigations of this kind can realize its burdensome and time-taking effort in doing justice to every aspect of the problems under consideration. We are not at the end of our cancer investigations, but

only at the beginning. Irrespective of whether a cancer cause or a cancer cure should be discovered, the problem of cancer occurrence will remain with us for generations to come. I firmly believe in the light of my own investigations that the cause of cancer control is served best by those who in season and out draw attention to the lamentable delay which intervenes between the earliest known onset of the disease and its qualified treatment with the hope of a cure.

Summary of general conclusions: The foregoing discussion represents some of the general results of my San Francisco Cancer Survey and of cities and sections assisting in the investigation. They are all, for the time being, tentative and are subject to amplification and modification in the light of future results, which will be forthcoming in due course of time. I would fail if on this occasion I did not express my profound appreciation of the extraordinary courtesies extended to me by the health officers, medical practitioners, surgeons and others who have aided me in this investigation. It aims at the presentation of collective results which will facilitate the development of fundamental principles of cancer frequency throughout the United States and later on possibly of Canada and Mexico. For the time being the results chiefly emphasize the supreme importance of the time factor in the treatment of malignant diseases, which is often a lamentable failure because of the long delay intervening between the onset and the qualified consideration of cancerous affections. Irrespective of whether a cancer cause is discovered or is specific for the treatment of malignant disease, the problem will remain with us for many years to come, and in all probability increase in importance in proportion to other affections unless present-day tendencies are in this direction materially modified. The only hope for such a modification rests upon the better instruction of the laity and the medical profession as regards the imperative necessity for the earliest possible diagnosis and the earliest qualified treatment for all tumor formations, whether benign or malignant. The delay in this respect which is now characteristic of most of the cancer deaths is a lamentable indication of our failure to bring the truth of the cancer situation home to all concerned.