

SUMMARY OF VITAL STATISTICS, 1947

Department of Health, City of New York

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This annual publication appears about six months after the end of the last year for which statistics are shown, considerably in advance of the printed annual report of the Department of Health.

The tables are of two types. Some are historical showing changes over a period of time. Others are for the previous year only.

The historical data consist of five tables and one graph.

1. The first table on page 3 shows the population, live births, marriages, deaths, fetal deaths (abortions, miscarriages, and stillbirths), and infant mortality for each year since 1898, the year of the consolidation of the City of New York. Rates as well as numbers are shown in the table.

2. The number of cases of reportable infectious diseases since 1900 or since the disease was made reportable is shown in the second table on page 5.

3. The table on pages 8, 9 and 10 shows the yearly numbers of deaths and the crude death rates for each of 23 causes of death of public health interest for the last 30 years. The changes in the crude death rates, showing some health problems already solved and others still to be solved, are thus readily available.

4. Crude rates are affected by the age, color, and sex composition of the population. The greater the percentage of older persons in the population, the more deaths will there be and the higher will be the crude death rate. Similarly, the greater the percentage of non-whites in the population, the greater will be the crude death rate from such causes as tuberculosis. To eliminate the effect of changes in the age, sex, and color composition of the city's population a "corrected" or "standardized" rate is used. This rate is the weighted average of the age specific rates for the particular cause. The age specific rates are more valuable, but lack of space sometimes dictates the use of a "standardized" rate. The actual value or level of these rates depends on the standard used, since the standard determines the weighing factors, and an individual value has little meaning.

However, a series of standardized rates for a particular cause, shows the changes in the rate for that cause exclusive of the effects of changes in the composition of the population. This permits judging whether the rates are really increasing or decreasing and by how much. For this reason there is included the middle table on page 6, which shows "standardized" rates for deaths from all causes and 12 individual causes. As an illustration of the use of the table, let us look at the crude and "standardized" death

rates from cancer and the degenerative (cardio-vascular-renal) diseases. Between 1920 and 1940, the crude cancer rate increased from 93.5 per 100,000 to 164.8, an increase of 76 percent. During the same period the "standardized" rate increased from 101.7 to 125.1, an increase of only 23 percent. The latter is more nearly correct, and it may be said that the change in the age composition of the population was responsible for most of the increase of the crude rate. The cardio-vascular-renal group presents a still more striking picture. The crude rate increased 25 percent, while the "standardized" rate decreased 18 percent. In other words, if the effect of the aging of the population is eliminated, the cardio-vascular-renal rate is found to have gone down.

5. The age specific rates, by sex, for deaths from all causes are shown for the five census years since 1900 in the top table of page 6. The reduction in the risk of dying in each age group shows why present New Yorkers may expect to live much longer than did those of 1900.

6. The chart at the bottom of page 6 shows how the city's population has aged in the first 40 years of this century. The increases in the crude death rates from the diseases of old age such as those of the cardio-vascular-renal system and cancer are due to this aging of the population.

The tables showing data for the last completed calendar year are four in number.

1. At the bottom of page 3, there is a table which shows the population of each of the city's five boroughs as well as the number of live births, deaths from all causes, fetal deaths, and maternal deaths which occurred in each borough.

2. Not all the deaths in any borough are of residents of that borough. Neither are all the births in a borough to mothers residing in that borough. Manhattan has more hospital facilities than its sister boroughs. The result is that less than 80 percent of the deaths in Manhattan are of persons who reside there, and only 65 percent of the births are to mothers who live on Manhattan Island. On the other hand, many of the residents of the more recently developed boroughs of the Bronx and Queens use the facilities in the boroughs of Manhattan and Brooklyn, so that the numbers of recorded births and deaths in the newer boroughs are smaller than the resident numbers. The table on page 4 shows, in addition to the total events recorded in the city, the same events by boroughs of residence as well as those occurring to known non-residents of the city. This table also shows deaths from each of the 44 causes of death of the Abridged International List,

Rates for the city as a whole are based on the total events recorded in the city. Non-resident data are not excluded. Resident data for New York City are published by the National Office of Vital Statistics, the only agency which can do this job thoroughly since it gets copies of all certificates of birth and death occurring in the United States. The figures published by the Office of Vital Statistics show that for New York City there are practically no differences between the recorded and resident figures. In only two causes of death are there noteworthy differences between the two sets of figures. The recorded cancer rate is about five percent higher than the resident rate. The recorded accidental death rate is about five percent lower than the resident rate.

3. The top table on page 5 shows the population

at the last census as well as the deaths from all causes during the last calendar year by age according to color and sex.

4. One of the most interesting tables is the one on page 7. It shows the leading causes of death at six different age groups, by sex. For instance, at one to 14 years of age, accidents cause more deaths among males than any other cause. In females of the same age group, accidents, pneumonia, and influenza run a neck-and-neck race for the top place. In the next age group, accidents retain first place among males, but among females, tuberculosis is first, heart disease second, and accidents are only third. Beginning with age 45 years, heart disease takes over first place and cancer second place.

REVISION OF POPULATION ESTIMATES SINCE 1940

Between 1930 and 1940 the population of New York City increased 524,549 or an average of 52,455 per year. Since 1940 the Department of Health has estimated the population of the city by adding to the 1940 census figure 52,455 for each additional year. There is evidence that the estimates resulting from this method are too low. This indicated that a better method of estimating the city's population was in order.

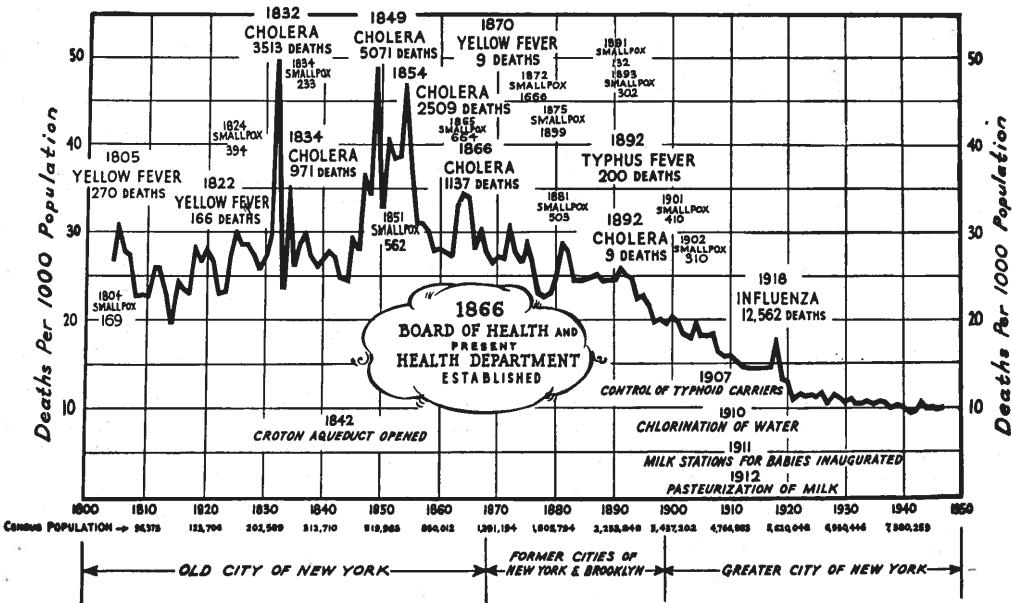
The first step was to divide the average yearly increase between 1930 and 1940 into its two components—that due to natural increase and that due to migration. The former can be obtained with a good degree of accuracy, and the latter

still remains an estimate. However, the estimated part of the annual increase is less than half of the total. In the 1930 to 1940 period the migration increase was but 22,110 per year, 42 percent of the total average increase.

The second and final step consisted of adding each year to the population of the previous year, this increment of 22,110 plus the actual natural increase of the previous year.

This change in the estimated method is responsible for the difference between the population figures and a few rates as shown in this edition and those cited in previous editions of the Summary.

The CONQUEST OF PESTILENCE in NEW YORK CITY ~ As Shown by the Death Rate as Recorded in the Official Records of the Department of Health.



Population, Births, Marriages, Deaths and Infant Mortality, 1898-1947

YEAR	Estimated Population July 1	LIVE BIRTHS*		MARRIAGES		DEATHS		FETAL DEATHS		INFANT MORTALITY	
		Total Reported	Rate per 1,000	Total Reported	Rate Per 1,000	Total Reported	Rate per 1,000	Total Reported	Ratio to 1,000 Live Births	Deaths Under One Year	Rate per 1,000 Live Births
1898.....	3,272,000	119,000	36.4	28,885	8.8	66,294	20.3	5,638	47.4	16,770	140.9
1899.....	3,357,000	116,000	34.6	30,474	9.1	65,343	19.5	5,463	47.1	15,381	132.6
1900.....	3,446,000	123,000	35.7	32,247	9.4	70,872	20.6	5,815	47.3	16,640	135.3
1901.....	3,554,000	122,000	34.3	33,447	9.4	70,720	19.9	5,750	47.1	15,467	126.8
1902.....	3,666,000	127,000	34.6	36,207	9.9	68,085	18.6	6,011	47.3	15,526	122.3
1903.....	3,781,000	129,000	34.1	38,174	10.1	67,864	17.9	6,078	47.1	14,413	111.7
1904.....	3,901,000	133,000	34.1	39,436	10.1	78,060	20.0	6,288	47.3	16,125	121.2
1905.....	4,026,000	135,000	33.5	42,675	10.6	73,714	18.3	6,352	47.1	16,522	122.4
1906.....	4,167,000	141,000	33.8	48,355	11.6	76,203	18.3	6,646	47.1	17,188	121.9
1907.....	4,314,000	149,000	34.5	51,097	11.8	79,205	18.4	7,351	49.3	17,437	117.0
1908.....	4,469,000	146,000	32.7	37,449	8.4	73,072	16.3	7,191	49.3	16,231	111.2
1909.....	4,632,000	142,000	30.7	41,513	9.0	74,105	16.0	6,697	47.2	15,976	112.5
1910.....	4,785,000	143,000	29.9	46,417	9.7	76,742	16.0	6,751	47.2	16,215	113.4
1911.....	4,873,000	141,000	28.9	48,765	10.0	75,423	15.5	6,673	47.3	15,053	106.8
1912.....	4,961,000	140,000	28.2	51,703	10.4	73,008	14.7	6,619	47.3	14,289	102.1
1913.....	5,049,000	140,000	27.7	51,268	10.2	73,902	14.6	6,629	47.4	13,780	98.4
1914.....	5,137,000	140,647	27.4	53,051	10.3	74,803	14.6	6,617	47.0	13,312	94.6
1915.....	5,225,000	141,256	27.0	50,997	9.8	76,193	14.6	6,413	45.4	13,866	98.2
1916.....	5,312,000	137,664	25.9	54,782	10.3	77,801	14.6	6,253	45.4	12,818	93.1
1917.....	5,400,000	141,564	26.2	59,210	11.0	78,575	14.6	6,117	43.2	12,568	88.8
1918.....	5,488,000	138,046	25.2	56,733	10.3	98,119	17.9	6,793	49.2	12,657	91.7
1919.....	5,576,000	130,377	23.4	60,256	10.8	74,433	13.3	5,984	45.9	10,639	81.6
1920.....	5,684,000	132,856	23.4	64,422	11.3	73,249	12.9	6,234	46.9	11,340	85.4
1921.....	5,812,000	134,241	23.1	60,846	10.5	64,257	11.1	6,297	46.9	9,548	71.1
1922.....	5,939,000	129,684	21.8	58,192	9.8	69,690	11.7	6,125	47.2	9,666	74.5
1923.....	6,067,000	129,160	21.3	66,430	10.9	69,452	11.4	6,023	46.6	8,578	66.4
1924.....	6,195,000	130,436	21.1	62,254	10.0	71,252	11.5	6,448	49.4	8,820	67.6
1925.....	6,323,000	128,790	20.4	64,826	10.3	71,864	11.4	6,134	47.6	8,315	64.6
1926.....	6,451,000	125,515	19.5	68,417	10.6	76,082	11.8	6,054	48.2	8,509	67.8
1927.....	6,579,000	128,889	19.6	66,431	10.1	70,430	10.7	5,895	45.7	7,210	55.9
1928.....	6,707,000	126,332	18.8	62,424	9.3	78,091	11.6	6,121	48.5	8,280	65.5
1929.....	6,835,000	124,404	18.2	65,780	9.6	77,482	11.3	5,726	46.0	7,281	58.5
1930.....	6,944,000	122,811	17.7	63,337	9.1	74,888	10.8	5,700	46.4	7,030	57.2
1931.....	6,996,000	115,621	16.5	61,574	8.8	77,418	11.1	5,579	48.3	6,427	55.6
1932.....	7,048,000	109,878	15.6	58,957	8.4	74,319	10.5	5,396	49.1	5,594	50.9
1933.....	7,101,000	103,500	14.6	60,116	8.5	75,153	10.6	5,347	51.7	5,508	53.2
1934.....	7,153,000	101,239	14.2	67,347	9.4	75,857	10.6	5,070	50.1	5,287	52.2
1935.....	7,206,000	100,657	14.0	68,372	9.5	75,057	10.4	4,902	48.7	4,790	47.6
1936.....	7,258,000	98,507	13.6	72,234	10.0	77,638	10.7	4,992	50.7	4,490	45.6
1937.....	7,311,000	101,988	13.9	69,417	9.5	77,465	10.6	4,847	47.5	4,457	43.7
1938.....	7,363,000	102,045	13.9	63,493	8.6	73,775	10.0	4,995	48.9	3,910	38.3
1939.....	7,416,000	102,261	13.8	62,288	8.4	75,439	10.2	6,831#	66.8#	3,793	37.1
1940.....	7,468,000	107,287	14.4	78,487	10.5	76,008	10.2	7,986	74.4	3,746	34.9
1941.....	7,521,000	114,367	15.2	83,012	11.0	74,553	9.9	8,974	78.5	3,519	30.8
1942.....	7,581,000	131,989	17.4	81,454	10.7	75,674	10.0	10,013	75.9	3,805	28.8
1943.....	7,658,000	134,520	17.6	76,059	9.9	83,174	10.9	9,508	70.7	4,069	30.2
1944.....	7,729,000	122,748	15.9	67,315	8.7	78,783	10.2	9,987	81.4	3,829	31.2
1945.....	7,794,000	128,853	16.5	72,589	9.3	79,726	10.2	10,367	80.5	3,918	30.4
1946.....	7,864,000	152,736	19.4	104,548	13.3	78,481	10.0	12,980	85.0	4,239	27.8
1947.....	7,957,000	171,174	21.5	95,897	12.1	80,733	10.1	14,077	82.2	4,517	26.4

* 1898-1913 birth figures are estimated, as the number actually reported was undoubtedly incomplete.

Increase due to improved reporting of fetal deaths under 20 weeks gestation.

Births, Deaths, Maternal Deaths and Fetal Deaths, by Borough of Report, 1947

BOROUGH	Estimated Population July 1	LIVE BIRTHS	DEATHS	FETAL DEATHS	MATERNAL DEATHS		
					Number	Rate per 10,000	Live Births
Manhattan	1,918,000	53,282	23,273	5,014	72	13.5	12.4
The Bronx	1,510,000	23,923	12,759	2,228	34	14.2	13.0
Brooklyn	2,844,000	67,091	25,901	4,814	57	8.5	7.9
Queens	1,495,000	22,418	11,243	1,844	18	8.0	7.4
Richmond	190,000	4,460	2,557	177	4	9.0	8.6
City of New York	7,957,000	171,174	80,733	14,077	185	10.8	10.0

* Live births and fetal deaths.

**Recorded Births, Fetal Deaths, and Deaths by Borough of Residence
City of New York, 1947**

	Total Recorded	Known Residents In New York City	Manhattan	Bronx	B'klyn	Queens	Rich'd	Known Non-Residents of City	Perma-nent Res. Un-known
Live births.....	171,174	34,934	30,103	63,407	31,417	4,348	6,443	522	
Rate per 1,000 population.....	21.5	18.2	19.9	22.3	21.0	22.9	.....	.....
Fetal deaths (stillbirths)*.....	14,077	3,636	2,580	4,692	2,263	187	589	130	
Rate per 1,000 live births.....	82.2	104.1	85.7	74.0	72.0	43.0	.....	.....
Deaths under one year.....	4,517	1,083	741	1,627	742	115	184	25	
Rate per 1,000 live births.....	26.4	31.0	24.6	25.7	23.6	26.4	.....	.....
Deaths under one month.....	3,442	836	562	1,214	595	89	123	23	
Rate per 1,000 live births.....	20.1	23.9	18.7	19.1	18.9	20.5	.....	.....
Deaths from all causes.....	80,733	22,778	13,111	26,433	12,890	1,853	2,887	781	
Death rate per 1,000 population.....	10.1	11.9	8.7	9.3	8.6	9.8	.....	.....
1. Typhoid and paratyphoid fevers.....	2	.....	.....	1	.....	.....	.....	.....	1
2. Plague.....	1	1	.....	.....	.....	.....	.....	.....
3. Scarlet fever.....	13	7	2	2	1	1	.....	.....
4. Whooping cough.....	12	4	2	5	.....	1	.....	.....
5. Diphtheria.....	2,920	1,211	371	741	358	28	111	100	
6. Pulmonary tuberculosis.....	208	97	30	52	18	2	9	.....
7. Other tuberculosis.....	2	.....	.....	1	1	.....	.....	.....
8. Malaria.....	646	301	77	137	83	7	20	21	
9. Syphilis.....	41	12	4	14	8	.....	3	.....
10. Influenza.....	2	.....	1	.....	.....	.....	1	.....
11. Smallpox.....	2	.....	2	.....	.....	.....	.....	.....
12. Measles.....	3	.....	.....	1	1	1	.....	.....
13. Typhus fever.....	379	110	47	122	55	5	40	.....
14. Other infectious diseases.....	35	13	6	9	3	3	1	.....
(a) Meningococcus meningitis.....	10	5	2	3	.....	.....	.....	.....
(b) Acute poliomyelitis.....	52	18	3	21	6	.....	4	.....
(c) Epidemic encephalitis.....	.....	.....	.....	.....	.....	.....	.....	.....
15. Cancer.....	14,644	3,857	2,457	4,590	2,493	301	898	48	
16. Non-malignant tumors.....	330	87	55	92	54	5	37	.....
17. Chronic rheumatism, gout.....	47	22	9	6	8	1	.....	1	
18. Diabetes.....	3,481	799	666	1,411	474	83	38	10	
19. Alcoholism.....	291	153	16	57	32	3	9	21	
20. Avitaminoses, other general diseases and chronic poisonings.....	1,050	274	164	337	155	18	98	4	
21. Simple meningitis and spinal cord diseases.....	230	75	38	64	32	6	12	3	
22. Intracranial lesions of vascular origin.....	3,645	1,001	644	1,193	577	127	86	17	
23. Other diseases of the nervous system and sense organs.....	389	98	60	143	57	11	.....	17	3
24. Diseases of the heart.....	31,309	8,326	5,248	10,936	5,109	774	703	213	
25. Other diseases of the circulatory system.....	1,355	402	196	470	209	38	33	7	
26. Bronchitis.....	139	42	31	36	19	3	7	1	
27. The pneumonias.....	2,964	926	459	942	429	70	74	64	
(a) Bronchopneumonia.....	1,532	412	270	555	215	29	38	13	
(b) Lobar pneumonia.....	1,423	509	189	384	214	40	36	51	
28. Other respiratory diseases (except tuberculosis).....	257	78	38	70	50	7	9	5	
29. Diarrhea and enteritis.....	262	51	55	109	24	4	16	3	
(a) Diarrhea and enteritis under 2 years.....	199	38	40	90	18	2	10	1	
30. Appendicitis.....	276	65	43	101	57	4	6	.....
31. Diseases of the liver and biliary passages.....	1,859	611	299	516	304	39	70	20	
32. Other digestive diseases.....	1,429	395	238	424	257	41	64	10	
33. Nephritis, all forms.....	2,602	746	392	821	485	71	80	7	
34. Other diseases of urinary and genital systems.....	743	211	148	224	116	12	25	7	
35. Puerperal infection.....	60	22	12	15	5	2	4	.....
36. Other puerperal causes.....	125	28	31	40	19	2	5	.....
37. Diseases of the skin and bones.....	100	30	17	29	16	2	5	1	
38. Diseases of early infancy.....	3,676	884	594	1,287	639	96	169	7	
39. Old age.....	9	3	1	2	.....	3	.....	.....
40. Suicide.....	933	318	121	258	179	17	36	4	
41. Homicide.....	369	169	50	87	26	4	9	24	
42. Motor vehicle accidents.....	650	187	87	207	97	10	43	19	
43. Other accidents.....	3,257	1,169	405	884	439	53	147	160	
44. Causes not known or ill-defined.....	21	6	1	6	4	1	3	.....

Numbers at left are those of Abridged International List, 1938 revision.
*Stillbirths and reported abortions.

Population in 1940 and Deaths in 1947, City of New York

Age	1940 Population by Age, Color and Sex						Deaths in 1947 by Age, Color and Sex					
	White		Negro		Other		White		Negro		Other	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All ages	3,455,003	3,522,498	205,727	252,717	15,563	3,487	41,135	32,552	3,472	3,327	225	22
Under 5.....	206,210	197,029	14,706	14,985	499	465	2,380	1,819	482	385	7	9
5-9.....	221,887	214,597	16,442	16,692	469	469	146	89	36	27	....	....
10-14.....	265,679	258,741	17,294	18,554	480	360	94	67	25	26	....	1
15-19.....	284,588	286,824	15,574	19,104	555	297	176	117	63	72	1	1
20-24.....	289,049	318,135	15,251	25,848	562	308	303	237	124	155	2	1
25-29.....	301,328	343,262	20,008	30,970	1,222	363	363	326	120	177	3	2
30-34.....	308,050	329,637	21,924	29,256	1,808	352	545	531	170	178	5	....
35-39.....	304,806	309,413	23,418	28,768	2,726	290	860	792	235	224	7	1
40-44.....	294,594	289,524	20,299	21,490	2,578	229	1,573	1,051	343	249	12	....
45-49.....	266,165	252,262	14,802	15,579	1,802	133	2,438	1,615	334	303	25	....
50-54.....	231,787	212,383	10,251	11,217	1,283	99	3,811	2,155	357	307	30	....
55-59.....	170,782	161,083	6,675	7,576	705	50	4,880	2,737	316	282	37	1
60-64.....	127,865	130,296	4,311	4,974	492	36	5,632	3,511	278	254	40	1
65-69.....	86,370	97,299	2,676	3,845	229	20	5,630	4,175	238	252	26	1
70-74.....	53,153	64,217	1,219	1,978	102	6	4,980	4,569	162	201	16	....
75 and over	42,690	57,796	877	1,881	51	10	7,324	8,761	189	235	14	4

Cases of Reportable Infectious Diseases, City of New York, 1900-1947

Year	Pulmonary Tuberculosis	Diphtheria	Measles	Scarlet Fever	Chickenpox	Typhoid Fevers	Whooping Cough	Meningococcus Meningitis	Poliomyelitis	Syphilis	Gonorrhea	Influenza	Pneumonia	Epidemic Encephalitis
1900	11,997	12,913	19,298	6,683	1,226	2,658	174	7						
1901	13,703	12,329	11,990	16,692	2,437	2,748	113	13						
1902	12,914	15,319	20,251	11,894	3,269	3,871	313	10						
1903	15,214	18,317	13,689	10,887	4,181	3,671	1,066	20						
1904	18,723	18,158	32,861	13,495	4,263	3,412	1,016	482						
1905	20,831	13,686	19,026	8,071	5,473	4,326	2,637	2,755						
1906	20,085	14,757	38,653	7,881	4,667	3,467	2,177	1,032						
1907	19,725	15,276	16,637	15,788	4,308	4,426	1,920	828						
1908	23,325	16,431	38,276	24,426	5,928	3,058	1,182	380						
1909	25,667	15,097	31,950	12,475	6,765	3,499	2,752	346						
1910	32,065	16,940	35,374	18,924	5,534	3,582	2,018	242						
1911	24,513	13,485	25,540	15,794	6,758	3,450	3,210	266	358					
1912	22,752	13,533	39,018	12,716	7,649	3,076	2,132	250	504					
1913	22,674	14,845	29,350	10,739	6,897	2,643	3,529	232	310	10,623	7,440			
1914	21,604	17,129	25,793	11,105	9,632	2,260	3,798	318	129	21,128	9,526			
1915	22,141	15,279	38,186	9,879	8,721	2,455	6,771	174	95	17,335	9,709			
1916	19,297	13,521	21,603	5,814	9,617	1,617	7,460	263	9,023	20,128	6,341			
1917	17,494	12,624	27,519	6,260	8,548	1,442	5,597	322	139	19,833	8,312			
1918	14,439	11,454	28,675	4,460	4,196	1,238	5,558	477	134	17,320	6,538			
1919	14,570	14,014	8,194	4,594	5,326	854	1,658	317	42	19,241	5,677	25,218	10,325	118
1920	14,035	14,166	35,083	6,537	5,534	969	7,530	244	154	19,440	4,535	69,824	25,983	573
1921	12,966	15,110	7,738	13,516	8,041	899	5,808	279	588	14,096	5,287	2,486	14,143	528
1922	13,329	10,427	40,569	10,269	5,738	790	4,799	218	224	13,199	5,599	21,042	19,121	611
1923	11,336	8,050	13,999	8,237	8,671	890	4,484	133	577	16,879	6,817	16,061	15,952	923
1924	11,924	9,687	33,561	8,399	8,260	1,687	8,244	156	344	16,402	6,137	1,753	18,594	465
1925	10,955	9,051	9,483	8,840	7,546	1,417	4,826	120	307	15,630	5,466	1,745	15,651	327
1926	10,498	7,531	39,750	7,968	6,757	913	3,487	170	111	17,700	4,728	5,911	22,661	297
1927	10,873	13,507	2,101	18,339	9,444	762	6,052	177	537	24,324	7,006	2,048	18,273	232
1928	11,614	10,776	35,008	10,586	7,082	688	5,876	1,102	572	25,034	7,431	2,878	21,079	193
1929	11,938	8,548	2,537	7,952	9,264	607	2,944	1,000	71	28,772	8,840	11,121	21,132	173
1930	11,821	3,794	23,635	7,592	7,901	552	4,538	503	78	32,219	9,737	1,010	17,081	100
1931	11,794	3,999	26,519	11,900	9,113	637	8,643	392	4,138	34,894	9,745	4,498	21,116	97
1932	10,589	3,581	10,354	21,093	8,862	598	7,126	207	143	42,315	11,640	3,418	17,835	57
1933	9,991	1,891	36,216	8,262	11,966	588	6,009	114	831	42,242	11,164	2,617	16,972	86
1934	9,990	1,593	5,015	8,820	12,177	378	8,764	102	73	46,276	10,953	899	14,489	51
1935	8,796	1,189	28,490	14,602	10,866	349	8,703	529	2,054	47,659	11,069	622	13,185	69
1936	8,987	1,124	36,548	11,417	8,324	334	4,461	538	34	68,969	14,445	1,396	15,786	37
1937	9,128	1,184	12,091	10,058	12,723	299	4,653	228	243	88,101	17,872	4,181	16,393	55
1938	8,748	700	34,604	8,419	11,112	312	12,232	112	43	37,077*	12,935	447	12,969	38
1939	8,277	543	3,653	6,121	9,103	198	5,821	71	184	32,874	12,810	1,546	16,875	62
1940	8,212	386	10,496	13,569	13,046	171	5,775	48	67	30,718	14,639	791	13,808	28
1941	8,459	362	79,646	7,206	9,773	183	7,811	118	404	27,194	12,297	2,677	10,707	49
1942	9,145	392	2,261	7,009	10,978	119	9,240	411	88	30,036	12,022	441	10,130	52
1943	8,283	274	23,627	9,484	9,290	123	3,678	1,406	361	25,878	12,957	1,387	7,663	37
1944	7,229	232	26,048	8,509	8,441	122	2,810	1,104	1,890	23,069	14,489	266	5,981	37
1945	6,232	254	1,870	8,347	7,905	118	4,992	487	547	22,690	18,009	334	5,830	34
1946	6,386	366	22,408	8,009	6,586	110	2,135	246	716	26,765	24,350	394	3,930	38
1947	6,832	378	7,915	3,583	11,921	75	3,224	113	224	26,303	22,746	268	2,517	30

* Figures prior to 1938 were based on positive laboratory findings and included much duplication. Beginning with 1938 duplicates have, as far as possible, been omitted.

Age Specific Death Rates, Per 1,000 Population
City of New York, 1900-1940

Age	1901-'02-'03		1909-'10-'11		1919-'20*		1929-'30-'31		1939-'40-'41	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
0-4	60.3	52.6	50.2	43.2	32.4	26.5	19.4	15.4	11.3	8.8
5-9	5.8	5.2	4.2	3.9	3.8	3.1	2.5	2.0	1.0	0.8
10-14	2.8	2.8	2.4	2.3	2.4	2.2	1.7	1.3	0.9	0.7
15-19	4.8	4.1	3.9	3.1	4.0	3.7	2.6	2.2	1.3	1.1
20-24	7.3	6.0	5.3	4.6	5.8	5.4	3.4	3.2	1.7	1.6
25-29	9.5	8.2	6.9	5.9	6.5	6.9	3.8	3.4	2.2	2.0
30-34	12.6	9.8	9.6	7.6	7.7	7.0	5.1	4.1	3.1	2.4
35-39	15.1	11.6	13.0	9.3	9.2	7.3	7.0	5.0	4.5	3.2
40-44	19.0	13.2	16.5	11.2	10.9	9.0	10.1	6.9	7.0	4.8
45-49	22.0	15.0	20.8	14.3	15.2	12.1	14.8	10.5	11.2	7.4
50-54	29.2	22.8	26.5	19.1	20.6	16.3	22.0	15.0	17.2	11.5
55-59	38.8	31.4	37.0	28.8	30.1	24.8	32.0	23.4	25.9	17.5
60-64	51.4	43.8	51.4	44.1	40.8	33.8	44.7	35.3	37.9	26.8
65-69	69.9	60.5	68.5	58.9	60.1	55.0	62.0	50.2	55.0	40.8
70-74	95.8	85.2	89.6	81.2	85.1	79.5	84.3	73.3	78.9	62.5
75-79	141.0	119.3	127.3	114.4	116.2	107.6	120.7	109.2	111.4	93.3
80-84	175.9	157.9	167.4	159.6	162.6	143.6	170.9	151.2	149.8	141.5
85 & Over	252.3	223.0	257.4	232.3	224.8	210.2	242.8	227.5	230.5	222.2

* As Census date is the midpoint of the period presented, only two years are used for 1919-'20 calculation, the Census having been made on Jan. 1, 1920.

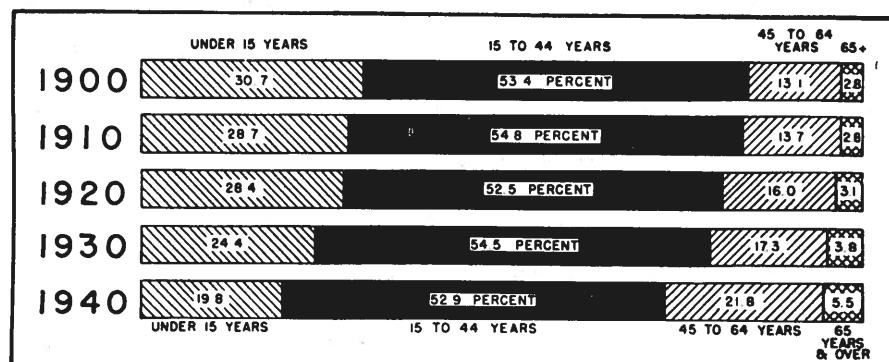
Standardized Death Rates* Per 100,000 Population
City of New York, 1900-1940

Cause of Death	Int. List Nos.	1901-'02-'03					1909-'10-'11			1919-'20		1929-'30-'31		1939-'40-'41	
		1901-'02-'03	1909-'10-'11	1919-'20	1929-'30-'31	1939-'40-'41	1901-'02-'03	1909-'10-'11	1919-'20	1929-'30-'31	1939-'40-'41				
All causes.....		2,075.0	1,805.0	1,526.0	1,219.0	893.0									
Pulmonary tuberculosis.....	(13)	204.3	172.2	126.6	63.6	40.0									
Other forms tuberculosis.....	(14-22)	35.4	30.3	23.7	11.3	5.0									
Influenza & pneumonia.....	(33, 107-109)	281.3	259.7	293.8	164.2	52.8									
Cancer.....	(45-55)	83.2	94.8	101.7	116.7	125.1									
Diabetes.....	(61)	16.6	19.3	19.9	26.3	31.2									
Appendicitis.....	(121)	12.3	13.1	- 13.4	16.1	8.8									
Nephritis.....	(130-132)	182.7	142.9	107.5	47.4	37.9									
Diseases of circulatory system.....	(90-103)	193.6	299.0	325.6	376.2	303.0									
Total degenerative diseases.....	(83a, 90-103.)	469.6	467.5	450.4	433.1	370.5									
(130-132)															
Total accidents.....	(169-195)	94.2	82.1	70.5	71.7	47.0									
Auto accidents.....	(170)	†	†	15.1	20.5	11.1									
Other accidents.....	(169, 171-195)	†	†	55.5	51.1	35.8									

* For 1901-'02-'03 and 1909-'10-'11, rates are standardized for age and sex; for 1919-'20, 1929-'30-'31 and 1939-'40-'41 rates are standardized for age, sex and color. Standard is the population of England and Wales in 1901. Rates were adjusted for sex and color according to the distribution of the population of states of the Death Registration Area of the United States in 1920.

† Data not available for 1901-1911.

New York City's Aging Population



Chief Causes of Death in Certain Age Groups*

City of New York, 1947

Males				Females	
Deaths	Per Cent			Deaths	Per Cent
947	37			Premature Birth	755 39
457	18			Congenital Malformations	388 20
323	13			Injury at Birth	227 11
288	11			Pneumonia and Influenza	189 10
242	9			Other Diseases of Early Infancy	157 8
112	4			Diarrhea	77 4
55	2			Accidents	53 3
144	6			All Other Causes	103 5
<u>2,568</u>	<u>100</u>			Total	<u>1,949</u> <u>100</u>
I TO 14 YEARS					
158	26			Accidents	86 18
52	9			Congenital Malformations	51 11
55	9			Pneumonia and Influenza	48 10
54	9			Cancer	41 9
37	6			Leukemias and Aleukemias	35 7
29	5			Tuberculosis	28 6
25	4			Contagious Diseases**	20 4
20	3			Heart Diseases	22 5
172	29			All Other Causes	143 30
<u>602</u>	<u>100</u>			Total	<u>474</u> <u>100</u>
15 TO 24 YEARS					
102	15			Tuberculosis	184 32
134	20			Accidents	36 6
70	11			Heart Diseases	47 8
69	10			Cancer	38 7
59	9			Homicide	16 3
33	5			Nephritis	20 3
26	4			Pneumonia and Influenza	23 4
21	3			Suicide	25 4
<u>155</u>	<u>23</u>			Puerperal Diseases	42 7
<u>669</u>	<u>100</u>			All Other Causes	<u>152</u> <u>26</u>
Total					
25 TO 44 YEARS					
1,001	24			Heart Diseases	624 18
478	11			Cancer	803 23
605	14			Tuberculosis	422 12
495	12			Accidents	190 5
167	4			Nephritis	150 4
<u>190</u>	<u>4</u>			Pneumonia and Influenza	127 4
165	4			Suicide	136 4
153	4			Cirrhosis of the Liver	125 3
150	3			Homicide	38 1
80	2			Intracranial Lesions of Vascular Origin	76 2
<u>752</u>	<u>18</u>			Puerperal Diseases	143 4
<u>4,236</u>	<u>100</u>			All Other Causes	<u>697</u> <u>20</u>
Total					
45 TO 64 YEARS					
7,492	41			Heart Diseases	3,744 33
3,635	20			Cancer	3,251 29
505	3			Diabetes	874 8
1,104	6			Tuberculosis	201 2
605	3			Intracranial Lesions of Vascular Origin	626 6
945	5			Accidents	269 2
505	3			Nephritis	410 4
596	3			Pneumonia and Influenza	226 2
<u>2,791</u>	<u>16</u>			All Other Causes	<u>1,565</u> <u>14</u>
<u>18,178</u>	<u>100</u>			Total	<u>11,166</u> <u>100</u>
65 AND OVER					
9,091	49			Heart Diseases	9,198 50
3,426	18			Cancer	2,839 16
1,028	6			Intracranial Lesions of Vascular Origin	1,209 7
607	3			Diabetes	1,380 8
705	4			Accidents	781 4
597	3			Nephritis	686 4
659	4			Pneumonia and Influenza	578 3
<u>2,466</u>	<u>13</u>			All Other Causes	<u>1,527</u> <u>8</u>
<u>18,579</u>	<u>100</u>			Total	<u>18,198</u> <u>100</u>

* Arranged in order of importance for both sexes combined.

** International List numbers 1-44, except tuberculosis, syphilis and influenza.

YEAR	1918	1919	1920	1921	1922	1923	1924	1925
Population.....	5,488,000	5,576,000	5,684,000	5,812,000	5,939,000	6,067,000	6,195,000	6,323,000
Total deaths.....	98,119	74,433	73,249	64,257	69,690	69,452	71,252	71,864
Death rate.....	1,788	1,335	1,289	1,106	1,173	1,145	1,150	1,133
Total deaths under 5 years.....	21,019	15,744	17,288	13,672	14,847	11,839	12,891	11,444
Rate on estim. pop. under 5 years.....	3,767	2,811	3,082	2,441	2,685	2,153	2,335	2,071
Deaths under 1 year of age.....	12,657	10,639	11,340	9,548	9,666	8,578	8,820	8,311
Rate per 1,000 live births.....	92	82	85	71	75	66	68	61
Measles (35).....	790	218	736	165	977	245	506	130
Rate#.....	128.9	35.8	122.0	27.4	163.0	41.2	85.2	21.8
Whooping cough (9).....	665	161	615	350	268	202	382	307
Rate#.....	108.5	26.4	101.9	58.2	44.7	34.0	64.3	51.5
Scarlet fever (8).....	177	136	220	385	216	107	80	71
Rate#.....	113.3	8.6	13.7	23.7	13.2	6.5	4.8	4.4
Diphtheria (10).....	1,245	1,239	1,045	891	873	553	714	662
Rate#.....	79.8	78.2	64.9	54.9	53.4	33.6	43.1	39.8
Typhoid fevers (1, 2).....	196	121	137	123	129	140	184	195
Rate.....	3.6	2.2	2.4	2.1	2.2	2.3	3.0	3.1
Meningococcus meningitis (6).....	262	171	123	147	110	77	104	94
Rate.....	4.8	3.1	2.2	2.5	1.9	1.3	1.7	1.5
Pulmonary tuberculosis (13).....	8,779	7,395	6,165	5,143	5,033	4,951	4,780	4,776
Rate.....	160.0	132.6	108.5	88.5	84.7	81.6	77.2	75.5
Other forms tuberculosis (14-22).....	1,318	1,103	970	779	769	722	801	699
Rate.....	24.0	19.8	17.1	13.4	12.9	11.9	12.9	11.1
Influenza (33).....	12,562	4,834	3,492	384	869	1,158	549	665
Rate.....	228.9	86.7	61.4	6.6	14.6	19.1	8.9	10.5
Pneumonia (107-109).....	20,628	10,977	10,058	6,477	8,794	8,231	9,152	8,397
Rate.....	375.9	196.9	177.0	111.5	148.1	135.7	147.7	132.8
Other respiratory (104-6; 110-14).....	1,543	1,187	1,443	967	920	521	498	541
Rate.....	28.1	21.3	25.4	16.6	15.5	8.6	8.0	8.6
Cancer (45-55).....	4,931	5,147	5,317	5,573	5,945	6,287	6,557	6,784
Rate.....	89.8	92.3	93.5	95.9	100.1	103.6	105.8	107.3
Diabetes (61).....	1,011	955	1,075	1,120	1,448	1,360	1,177	1,313
Rate.....	18.4	17.1	18.9	19.3	24.4	22.4	19.0	20.8
Appendicitis (121).....	584	690	792	824	883	887	946	1,022
Rate.....	10.6	12.4	13.9	14.2	14.9	14.6	15.3	16.2
Nephritis (130-2).....	5,269	5,007	4,833	4,105	4,450	4,367	3,705	3,912
Rate.....	96.0	89.8	85.0	70.6	74.9	72.0	59.8	61.9
Diseases of circulatory sys. (90-103).....	15,660	14,077	15,195	15,696	17,350	18,453	19,616	19,453
Rate.....	285.3	252.5	267.3	270.1	292.1	304.1	316.6	307.7
Cerebral hem., apoplexy (83a).....	1,042	811	718	886	501	597	763	847
Rate.....	19.0	14.5	12.6	15.2	8.4	9.8	12.3	13.4
Total degenerative diseases†.....	21,971	19,895	20,746	20,687	22,301	23,417	24,084	24,212
Rate.....	400.3	356.8	365.0	356.0	375.5	386.0	388.7	382.9
Suicides (163, 164).....	724	703	670	831	789	825	829	935
Rate.....	13.2	12.6	11.8	14.3	13.3	13.6	13.4	14.8
Homicides (165-168).....	247	279	325	303	337	308	387	337
Rate.....	4.5	5.0	5.7	5.2	5.7	5.1	6.2	5.3
Automobile accidents (170)**.....	677	767	763	849	870	945	961	1,022
Rate.....	12.3	13.8	13.4	14.6	14.6	15.6	15.5	16.2
Other accidents (169, 171-195).....	3,613	3,059	2,856	2,634	2,801	3,249	3,239	3,765
Rate.....	65.8	54.9	50.2	45.3	47.2	53.6	52.3	59.5
Puerperal diseases (140-150).....	664	644	708	746	699	623	678	697
Rate per 10,000 total births.....	46	47	51	53	51	46	50	52
Rate per 10,000 live births.....	48	49	53	56	54	48	52	54

Note.—Numbers following disease names are numbers of International List, 1938 Revision.

#Rates for measles and whooping cough, per 100,000 under five years; rates for scarlet fever and diphtheria per 100,000 under five years.

*Coding changed in 1935, giving greater weight to Cerebral Hemorrhage than to Arteriosclerosis. **Motorcycle accidents not included.

Population, Deaths and Crude Death Rates per 100,000 Population, City of New York, 1918 to 1947

1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947		
5,451,000	6,579,000	6,707,000	6,835,000	6,944,000	6,996,000	7,048,000	7,101,000	7,153,000	7,206,000	7,258,000	7,311,000	7,363,000	7,416,000	7,468,000	7,521,000	7,581,000	7,658,000	7,729,000	7,794,000	7,864,000	7,957,000	Population Deaths Rate	
76,082	70,430	78,091	77,482	74,888	77,418	74,319	75,153	75,857	75,057	77,638	77,465	73,775	75,439	76,008	74,553	75,674	83,174	78,783	79,726	78,481	80,733	1,179 1,071 1,164 1,134 1,078 1,107 1,054 1,058 1,060 1,042 1,069 1,059 1,002 1,017 1,018 991 998 1,086 1,019 1,023 998 1,015	
12,599	9,971	11,760	9,836	9,224	8,968	7,409	7,422	6,726	6,282	5,689	5,618	4,891	4,584	4,402	4,162	4,387	4,758	4,506	4,588	4,902	5,082	Deaths under 5 Rate	
2,308	1,820	2,158	1,818	1,721	1,689	1,436	1,490	1,404	1,363	1,269	1,216	1,087	1,045	907	836	841	860	777	764	778	760	760	Infant deaths Rate
8,509	7,210	8,280	7,281	7,030	6,427	5,594	5,508	5,287	4,790	4,490	4,457	3,910	3,793	3,746	3,519	3,805	4,069	3,829	3,918	4,239	4,517	68 56 66 59 57 56 51 53 52 48 46 38 37 35 31 29 30 31 30 28 26	
706	37	346	30	154	134	58	213	25	105	83	28	42	1	3	25	1	19	22	3	23	2	Measles Rate#	
119.3	6.3	58.7	5.1	26.4	23.2	10.2	38.9	4.7	20.7	16.9	5.8	8.8	0.2	0.6	5.0	0.2	3.4	3.8	0.5	3.6	0.3	Whooping cough Rate#	
221	279	347	157	125	214	145	128	106	148	48	49	105	38	49	45	58	43	33	35	12	13		
37.3	47.3	58.8	26.8	21.4	37.0	25.6	23.4	20.1	29.1	9.8	10.2	22.0	7.9	10.1	9.0	11.1	7.8	5.7	5.8	1.9	1.9		
77	102	69	68	57	84	134	59	53	76	64	31	17	16	14	7	8	12	8	6	2	1	Scarlet fever Rate#	
4.6	6.1	4.1	4.0	3.4	5.0	7.9	3.5	3.1	4.5	3.8	1.9	1.1	1.0	0.9	0.5	0.6	0.9	0.5	0.4	0.1	0.1	Diphtheria Rate#	
477	717	642	463	198	186	210	86	103	68	35	58	26	22	10	10	7	16	6	15	18	12		
28.5	42.7	38.1	27.4	11.7	11.0	12.4	5.1	6.1	4.0	2.1	3.6	1.6	1.4	0.7	0.7	0.5	1.1	0.4	1.0	1.1	0.7		
111	78	87	76	62	77	64	70	44	34	33	26	22	12	14	5	5	15	11	8	2	2	Typhoid fevers Rate	
1.7	1.2	1.3	1.1	0.9	1.1	0.9	1.0	0.6	0.5	0.5	0.4	0.4	0.3	0.2	0.2	0.1	0.1	0.2	0.1	0.1	‡	Meningococcus men. Rate	
114	120	540	486	267	207	114	73	73	243	226	101	53	36	17	42	84	246	199	102	59	35		
1.8	1.8	8.1	7.1	3.8	3.0	1.6	1.0	3.4	3.1	1.4	0.7	0.5	0.2	0.6	1.1	3.2	2.6	1.3	0.8	0.4			
4,828	4,444	4,636	4,507	4,457	4,370	3,997	4,056	3,950	3,968	4,170	3,931	3,481	3,494	3,323	3,372	3,228	3,343	3,250	3,211	2,997	2,920	Pulmonary tuberculosis Rate	
74.8	67.6	69.1	65.9	64.2	62.5	56.7	57.1	55.2	55.1	57.5	53.8	47.3	47.1	44.5	44.8	42.6	43.7	42.0	41.2	38.1	36.7		
680	696	690	653	632	552	543	521	470	403	415	333	352	320	304	343	274	317	284	302	248	208	Other tuberculosis Rate	
10.5	10.6	10.3	9.6	9.1	7.9	7.7	7.3	6.6	5.6	5.7	4.6	4.8	4.3	4.1	4.6	3.6	4.1	3.7	3.9	3.2	2.6		
1,157	630	899	1,202	483	956	785	718	373	295	293	468	162	200	128	119	68	170	112	73	65	41	Influenza Rate	
17.9	9.6	13.4	17.6	7.0	13.7	11.1	10.1	5.2	4.1	4.0	6.4	2.2	2.7	1.7	1.6	0.9	2.2	1.4	0.9	0.8	0.5		
10,521	7,523	10,019	9,456	8,058	9,245	7,827	7,686	6,755	6,385	6,549	6,504	4,737	4,234	3,410	3,383	2,957	3,862	3,470	3,053	2,936	2,964	Pneumonia Rate	
163.1	114.4	149.4	138.4	116.0	132.2	111.1	108.2	94.4	88.6	90.2	89.0	64.3	57.1	45.7	45.0	39.0	50.4	44.9	39.2	37.3	37.3		
673	545	662	670	560	652	599	480	656	585	590	571	498	523	498	499	457	573	537	395	439	396	Other respiratory Rate	
10.4	8.3	9.9	9.8	8.1	9.3	8.5	8.0	8.2	8.1	8.1	7.8	6.8	7.1	6.7	6.6	6.0	7.5	6.9	5.1	5.6	5.0		
7,033	7,455	7,725	7,848	8,125	8,336	8,573	8,932	9,502	9,969	10,506	10,714	11,160	11,597	12,310	12,993	13,198	13,609	13,978	14,067	14,644	Cancer Rate		
109.0	113.3	115.2	114.8	117.0	119.2	121.7	125.8	132.8	138.3	144.8	146.5	151.6	156.4	164.8	160.5	171.4	172.3	176.1	179.3	178.9	184.0		
1,485	1,461	1,663	1,726	1,784	1,921	2,116	2,141	2,266	2,255	2,571	2,669	2,650	2,938	3,106	3,064	3,088	3,262	3,130	3,112	3,051	3,481	Diabetes Rate	
23.0	22.2	24.8	25.3	25.7	27.5	30.0	30.2	31.7	31.3	35.4	36.5	36.0	39.6	41.6	40.7	40.7	42.6	40.5	39.9	38.8	43.7	Appendicitis Rate	
1,022	1,018	1,043	1,071	1,111	1,157	1,065	1,149	1,006	920	1,049	935	825	800	677	564	439	434	389	378	291	276		
15.8	15.5	15.6	15.7	16.0	16.5	15.1	16.2	14.1	12.8	14.5	12.8	11.2	10.8	9.1	7.5	5.8	5.7	5.0	4.8	3.7	3.5		
4,360	3,182	3,433	3,177	2,905	2,806	2,972	3,638	4,484	4,141	4,041	3,847	3,589	3,353	3,545	3,242	3,042	3,393	2,909	2,819	2,686	2,602	Nephritis Rate	
67.6	48.4	51.2	46.5	41.8	40.1	42.2																	