

Cancer Statistics, 1970

Edwin Silverberg, B.S., and
Roald N. Grant, M.D.

Mortality and morbidity statistics on cancer provide a picture of the disease in relation to other diseases at a given time and also over a period of time, making it possible to detect any trends that may be occurring. The sources and applications of statistical data on cancer will be discussed briefly in this paper.

Mortality Statistics

Mortality statistics are readily available in the United States from death certificates stating the cause of death. This information is collected annually and presented in an official government publication, *Vital Statistics of the United States*.¹ International statistics are summarized in a publication of the World Health Organization, *World Health Statistics Annual*.²

Mortality data are usually expressed in terms of death rates. The death rate is the ratio of the deaths to the population at risk. The population base usually used is 100,000.

The trend of changes in mortality over a period of time is shown by plotting a graph of death rates such as those at the top of pages 15 and 17. From these graphs it is apparent that since 1930 mortality from cancer of the lung, cancer of the pancreas, and leu-

kemia has increased in both sexes, and cancer of the ovary mortality has increased in females, while cancer of the uterus mortality has decreased, and mortality from cancer of the stomach and liver has decreased in both sexes. Cancer of the colon and rectum mortality increased at first and then decreased in both sexes, while mortality from breast cancer has changed very little.

The graph also indicates whether the changes are relatively slow or rapid. Thus, while the increases in mortality from cancer of the pancreas, cancer of the ovary, and leukemia have been slow, the increase in lung cancer has been rapid. Lung cancer mortality in 1930 was the lowest on the respective graphs of male and female mortality. Today, it has the highest mortality of any single cancer site in males, and in females it is the fifth highest and rising rapidly.

The rates shown in the charts at the top of pages 15 and 17 are age-adjusted rates.³ These rates are adjusted by a weighting process to eliminate differences in rates which might come about because of differences in the composition of the population. In the case of cancer, we expect a higher unadjusted rate today than 30 years ago in the United States because a larger proportion of our population is now in the older ages and most forms of cancer occur more often in older people. Age-adjusted rates (or age-standardized rates as they are sometimes called) are necessary to eliminate the effect of the population age shift.

Mr. Silverberg is Project Statistician in the Epidemiology and Statistics Department of Research, American Cancer Society, New York, New York.

Dr. Grant is Vice President for Professional Education, American Cancer Society.

ESTIMATED CANCER DEATHS BY SEX AND SITE – 1970			
SITE	BOTH SEXES	MALES	FEMALES
All Sites	330,000	180,000	150,000
Buccal Cavity and Pharynx (Oral)	6,950	5,100	1,850
Lip	125	100	25
Tongue	1,625	1,200	425
Salivary Glands	650	400	250
Floor of Mouth	500	400	100
Other and Unspecified Mouth	1,100	700	400
Pharynx	2,950	2,300	650
Digestive Organs	98,000	52,500	45,500
Esophagus	6,100	4,600	1,500
Stomach	15,600	9,300	6,300
Small Intestine	750	400	350
Large Intestine (Colon)	35,300	16,400	18,900
Rectum	10,500	5,900	4,600
Liver and Biliary Passages	9,900	4,700	5,200
Pancreas	18,200	10,400	7,800
Other and Unspecified Digestive	1,650	800	850
Respiratory System	65,450	54,250	11,200
Larynx	2,850	2,550	350
Lung	61,700	51,200	10,500
Other and Unspecified Respiratory	900	550	350
Breast	30,350	250	30,100
Genital Organs	41,650	18,000	23,650
Cervix Uteri	9,400	–	9,400
Corpus Uteri	3,500	–	3,500
Ovary	9,900	–	9,900
Prostate	17,000	17,000	–
Testis	700	700	–
Other and Unspecified Genital	1,150	300	850
Urinary Organs	15,200	10,000	5,200
Kidney	6,300	3,900	2,400
Bladder and Other Urinary	8,900	6,100	2,800
Skin	5,100	3,000	2,100
Eye	350	150	200
Brain and Central Nervous System	7,900	4,600	3,300
Endocrine Glands	1,550	650	900
Thyroid	1,050	350	700
Other and Unspecified Endocrine	500	300	200
Bone	1,900	1,100	800
Soft Tissue	1,500	800	700
Leukemia	14,700	8,400	6,300
Lymphomas	17,900	9,950	7,950
Lymphosarcoma and Reticulosarcoma	8,600	4,700	3,900
Hodgkin's Disease	3,700	2,200	1,500
Multiple Myeloma	4,100	2,200	1,900
Other Lymphomas	1,500	850	650
All Other and Unspecified	21,500	11,250	10,250

TRENDS IN AGE-ADJUSTED CANCER DEATH RATES PER 100,000 POPULATION 1950-52 TO 1965-67					
Sex	Site	1950-52	1965-67	Percent Changes	Comments
Male	All Sites	131.5	151.8	+ 15	Slight Increase
Female	All Sites	119.9	109.3	- 9	Slight Decrease
Male	Breast	0.2	0.2	-	Constant Rate
Female	Breast	21.8	22.8	+ 5	Slight Fluctuations: Overall No Change
Male	Colon & Rectum	19.2	18.9	- 2	Slight Decrease in Both Sexes
Female	Colon & Rectum	18.3	16.1	- 12	
Male	Lung	19.7	40.6	+106	Steady Increase in Both Sexes Due to Cigarette Smoking
Female	Lung	4.0	6.8	+ 70	
Male	Oral	4.6	4.7	+ 2	Slight Fluctuations: Overall
Female	Oral	1.2	1.3	+ 8	No Change in Both Sexes
Male	Skin	2.4	2.6	+ 8	Steady Slight Increase
Female	Skin	1.6	1.5	- 6	Slight Fluctuations: Overall No Change
Female	Uterus	21.8	11.5	- 47	Steady Decrease Attributed in Part to Widening Acceptance of Regular Checkup with "Pap Test."
Male	Esophagus	3.8	4.1	+ 8	Slight Fluctuations: Overall
Female	Esophagus	0.9	1.0	+ 11	No Change in Both Sexes
Male	Stomach	17.9	9.7	- 46	Steady Decrease in Both Sexes:
Female	Stomach	9.4	4.8	- 49	Reasons Unknown
Male	Pancreas	6.5	8.6	+ 32	Steady Increase in Both Sexes:
Female	Pancreas	4.1	5.1	+ 24	Reasons Unknown
Male	Prostate	13.5	13.2	- 2	Early Increase, Later Decrease
Female	Ovary	6.8	7.6	+ 12	Steady Increase
Male	Kidney	2.8	3.4	+ 21	Steady Slight Increase
Female	Kidney	1.6	1.6	-	Slight Fluctuations: Overall No Change
Male	Leukemia	6.5	7.3	+ 12	Early Increase, Later Leveling Off
Female	Leukemia	4.6	4.7	+ 2	Slight Early Increase, Later Leveling Off

Morbidity Statistics

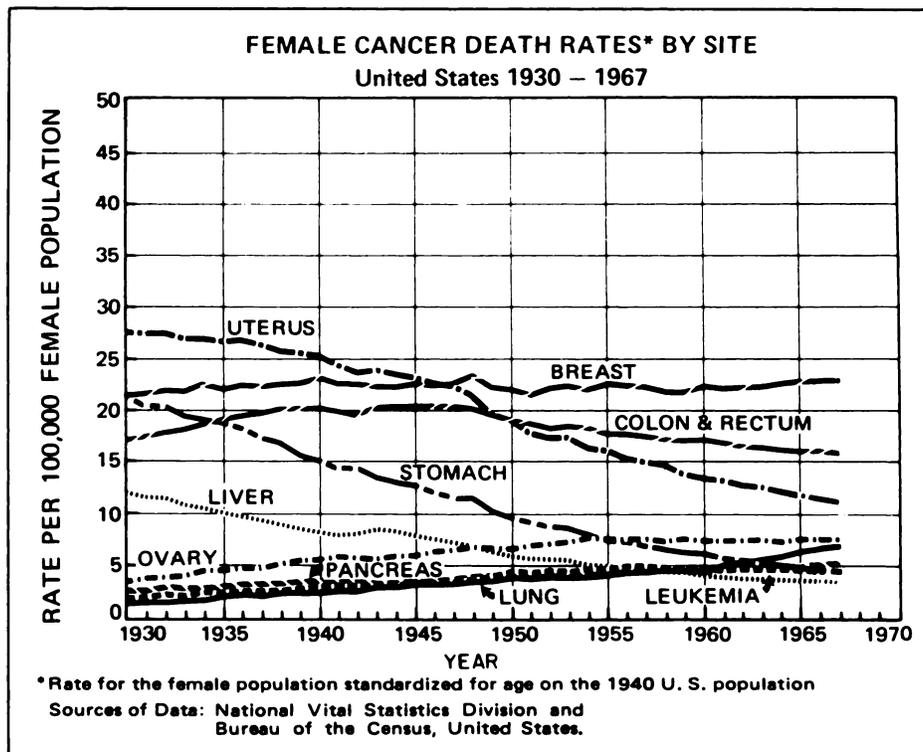
Morbidity data on cancer are generally not readily available, because in most states in the United States, as in most places of the world, cancer is not a reportable disease in the living. Therefore, to make national cancer morbidity estimates, we extrapolated from the morbidity experience data collected from several central registries.

The data used for the estimates in this article are from the Connecticut Tumor Registry, which collects case records of cancer patients in Connecti-

cut from hospitals on a contract basis; the New York State Registry, which collects cancer data for the state (excluding New York City) on the basis of a law requiring such reporting by physicians; and the Calhoun County, Michigan Cancer Registry, which collects data for the county provided by local hospitals on a continuing basis.⁴⁻⁶ In addition, data from special national cancer surveys are used. At the present time, the Third National Cancer Survey is being conducted by the National Cancer Institute in ten major areas of the

ESTIMATED NEW CANCER CASES, BY SEX AND SITE – 1970			
Site	Both Sexes	Male	Female
All Sites	625,000	328,600	296,400
Buccal Cavity and Pharynx (Oral)	14,200	9,800	4,400
Lip	1,500	1,300	200
Tongue	2,700	2,000	700
Salivary Glands	5,900	3,600	2,300
Floor of Mouth			
Other and Unspecified Mouth	4,100	2,900	1,200
Pharynx			
Digestive Organs	131,700	69,100	62,600
Esophagus	6,700	5,100	1,600
Stomach	17,000	10,000	7,000
Small Intestine	1,200	700	500
Large Intestine (Colon)	54,000	25,000	29,000
Rectum	21,000	11,000	10,000
Liver and Biliary Passages	10,100	4,900	5,200
Pancreas	18,800	11,000	7,800
Other and Unspecified Digestive	2,900	1,400	1,500
Respiratory System	77,100	64,200	12,900
Larynx	6,600	5,800	800
Lung	68,000	57,000	11,000
Other and Unspecified Respiratory	2,500	1,400	1,100
Breast	68,600	600	68,000
Genital Organs	95,400	37,500	57,900
Cervix Uteri	42,000	–	42,000
Corpus Uteri	–	–	–
Ovary	14,000	–	14,000
Prostate	35,000	35,000	–
Testis, Other Male	2,500	2,500	–
Other and Unspecified Genital, Female	1,900	–	1,900
Urinary Organs	31,600	21,800	9,800
Kidney	11,100	6,800	4,300
Bladder and Other Urinary	20,500	15,000	5,500
Skin	112,000	74,000	38,000
Eye	600	300	300
Brain and Central Nervous System	12,000	6,500	5,500
Endocrine Glands	3,200	1,000	2,200
Thyroid	2,500	600	1,900
Other and Unspecified Endocrine	700	400	300
Bone	2,000	1,100	900
Soft Tissue	5,500	2,700	2,800
Leukemia	18,700	11,000	7,700
Lymphomas	23,400	13,000	10,400
Lymphosarcoma and Reticulo-sarcoma	11,600	6,700	4,900
Hodgkin's Disease	4,800	2,700	2,100
Multiple Myeloma	7,000	3,600	3,400
Other Lymphoma			
All Other and Unspecified	29,000	16,000	13,000

Note: These estimates are offered as a rough guide and should not be regarded as definitive. Especially note that year to year changes may only represent improvements in the basic data.



United States and in Puerto Rico.⁷ The information from this survey will, when available, be very useful in making estimates of cancer morbidity in this country.

Survival Data

An indication of the efficacy of treatment of cancer is the survival rate. The *crude survival rate* is the percent of patients still alive after a certain period has elapsed from the date of original diagnosis of a disease. The *relative rate* or rate adjusted for normal life expectancy takes into consideration the fact that a certain number of people will die of other causes.⁸

National survival data by site, by sex, by stage of disease, and by type of treatment are available in *End Results In Cancer, Report No. 3*.⁹ These rates were developed from 13 selected cancer registries throughout the country which take part in the End Results Program of the

National Cancer Institute. (See page 17.) The survival rates presented in *End Results In Cancer, Report No. 3* are adjusted for normal life expectancy.

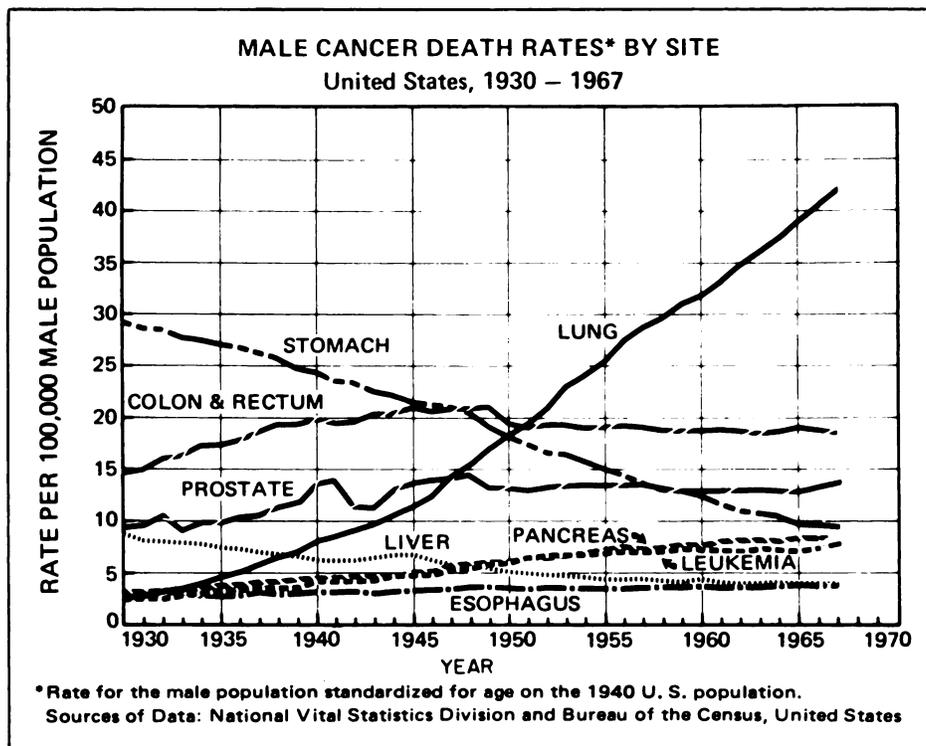
Coding of Cancer Topography and Morphology

In order to obtain data useful for comparison, a system of uniform coding of diseases and causes of death is necessary. One of the most common classifications is the International Classification of Diseases, which is revised every ten years by the World Health Organization. The current volume, the Eighth Revision of the *International Classification of Diseases, Injuries, and Causes of Death*, is published both by the World Health Organization and in the United States by the U.S. Department of Health, Education, and Welfare, where it is known as the *International Classification of Diseases Adapted For Use in the United States*.¹⁰⁻¹¹

**ESTIMATED CANCER DEATHS FOR ALL SITES, AND NEW CANCER CASES
FOR MAJOR SITES AND ALL SITES, BY STATE**

State	DEATHS		NEW CASES										
	All Sites		Major Sites										All Sites
	Number	Death Rate Per 100,000 Population	Breast	Colon-Rectum	Lung	Oral	Skin	Uterus	Prostate	Stomach	Leu-kemia		
Alabama	4,900	134	900	800	1,100	200	2,600	1,000	600	200	250	9,300	
Alaska	200	68	20	20	40	10	50	20	10	10	20	300	
Arizona	2,400	132	450	400	550	60	1,100	350	300	100	150	4,500	
Arkansas	3,300	162	500	550	700	90	1,600	500	500	150	250	6,200	
California	29,500	145	6,200	6,200	6,500	1,300	11,500	3,500	2,800	1,600	1,800	56,000	
Colorado	2,700	128	550	550	450	60	800	250	250	100	200	5,100	
Connecticut	5,000	163	1,200	1,300	950	250	1,300	400	500	350	300	9,500	
Delaware	800	145	150	200	200	20	400	100	70	40	40	1,600	
D.C.	1,600	189	350	300	300	150	250	200	150	70	50	3,000	
Florida	13,000	197	2,500	2,400	3,100	700	4,300	1,500	1,400	650	650	25,000	
Georgia	6,000	127	1,100	1,000	1,300	300	2,400	1,000	750	300	350	11,000	
Hawaii	800	106	100	150	150	50	150	80	40	100	60	1,600	
Idaho	1,000	140	200	200	200	20	600	100	150	40	90	2,000	
Illinois	19,200	174	4,400	5,000	3,900	850	5,700	2,500	2,000	1,000	1,100	36,000	
Indiana	8,400	166	1,600	2,100	1,700	350	3,300	1,300	850	350	450	16,000	
Iowa	4,900	179	1,100	1,300	850	150	1,900	550	700	200	350	9,500	
Kansas	3,800	166	800	950	700	150	1,700	600	450	150	250	7,200	
Kentucky	5,000	154	1,000	1,100	1,000	250	2,000	900	600	200	350	9,600	
Louisiana	5,400	142	1,000	1,000	1,300	250	2,400	800	650	350	300	10,000	
Maine	1,900	192	400	450	350	60	450	250	200	90	100	3,500	
Maryland	6,100	157	1,300	1,300	1,400	250	1,600	750	550	250	250	11,000	
Massachusetts	10,500	190	2,400	2,700	2,000	450	2,800	1,100	850	600	500	19,000	
Michigan	13,500	156	2,700	3,100	2,900	600	4,000	1,800	1,600	700	700	26,000	
Minnesota	6,100	167	1,300	1,500	950	200	1,900	550	850	400	350	11,000	
Mississippi	3,400	142	700	600	700	100	1,500	650	500	250	250	6,500	
Missouri	8,500	184	1,700	2,000	1,900	350	2,800	1,100	1,100	350	500	16,000	
Montana	1,100	153	200	250	150	30	300	100	150	50	80	2,000	
Nebraska	2,700	183	500	750	400	60	850	250	350	150	200	5,100	
Nevada	600	110	150	100	80	20	250	60	50	10	40	1,100	
New Hampshire	1,400	193	350	300	250	50	450	150	150	60	90	2,700	
New Jersey	13,300	180	3,100	3,500	2,800	550	3,600	1,500	1,000	750	650	25,000	
New Mexico	1,100	102	200	150	200	40	500	150	90	60	70	2,000	
New York	35,500	186	8,300	9,300	7,200	1,500	9,600	3,900	3,000	2,000	1,800	68,000	
North Carolina	6,500	125	1,400	1,000	1,300	300	2,100	1,100	700	250	450	12,000	
North Dakota	1,000	153	200	150	150	20	300	80	150	70	70	1,700	
Ohio	17,700	166	3,700	4,500	3,700	800	5,100	2,300	1,800	900	950	34,000	
Oklahoma	4,200	167	750	850	900	150	1,900	450	600	200	250	8,100	
Oregon	3,300	160	600	700	750	100	1,300	400	400	150	250	6,300	
Pennsylvania	22,200	190	4,600	5,800	4,200	950	5,900	2,600	2,300	1,100	1,200	42,000	
Rhode Island	1,900	208	450	500	400	100	650	150	150	100	80	3,700	
South Carolina	3,200	120	650	500	600	100	1,300	700	350	150	200	6,100	
South Dakota	1,100	161	250	250	200	30	400	150	200	70	100	2,000	
Tennessee	5,800	143	1,100	1,100	1,300	300	3,100	1,000	750	250	350	11,000	
Texas	15,500	136	2,900	2,800	3,600	700	7,600	2,100	1,600	850	1,100	30,000	
Utah	1,100	102	250	200	150	40	600	150	150	60	80	2,100	
Vermont	800	192	200	200	150	30	300	100	80	50	50	1,500	
Virginia	6,300	132	1,200	1,200	1,400	300	2,300	950	750	300	350	12,000	
Washington	5,000	162	1,000	1,100	1,000	250	1,500	550	600	200	350	9,400	
West Virginia	3,000	171	550	650	650	100	1,100	500	350	150	150	6,000	
Wisconsin	7,400	173	1,700	1,900	1,200	250	1,600	700	800	450	400	14,000	
Wyoming	400	120	80	80	80	10	300	60	60	20	30	800	
United States	330,000	160	69,000	75,000	68,000	14,000	112,000	42,000	35,000	17,000	19,000	625,000	

Note: These estimates are offered as a rough guide and should not be regarded as definitive. They are calculated according to the distribution of estimated 1970 cancer deaths by state. Especially note that year to year changes may only represent improvements in the basic data.



Prior to 1951, there was no large scale systematic coding of cancer records classified by histology. In 1951, the American Cancer Society published the *Manual of Tumor Nomenclature and Coding* (1951 Edition), which has been used extensively by registries.¹² In 1968, a new *Manual of Tumor Nomenclature and Coding, 1968 Edition* was published.¹³ The new edition contains a morphology coding based on Morphology Sections 8 and 9 of *Systematized Nomenclature of Pathology* published by the College of American Pathologists and a topography code based on the Malignant Neoplasm section of the Eighth Revision of the *International Classification of Diseases*.^{11,14}

The publications listed above are the basic sources for cancer statistics and coding, used by the American Cancer Society.

REGISTRIES

Albert Einstein Medical Center
Philadelphia, Pa.
California Tumor Registry
Berkeley, Calif.
Charity Hospital of Louisiana
New Orleans, La.
Connecticut Tumor Registry
Hartford, Conn.
Indiana University Medical Center
Indianapolis, Ind.
Massachusetts Cancer Registry
Boston, Mass.
New York Medical College
Flower and Fifth Avenue Hospitals
New York, N.Y.
State University of Iowa Hospital
Iowa City, Iowa
University of California Medical Center
San Francisco, Calif.
University of Chicago Clinics
Chicago, Ill.
University of Michigan Hospital
Ann Arbor, Mich.
University of Virginia Hospital
Charlottesville, Va.

FIVE-YEAR SURVIVAL RATES*, MAJOR SITES BY STAGE AND SEX					
SITES	MALE			FEMALE	
Lip		88%	91%		95%
Tongue		28	49		47
Mouth		51	72		77
Pharynx		22	37		29
Esophagus		1	4		7
Stomach		12	36		14
Colon & Rectum		41	67		46
Liver		0	2		5
Pancreas		1	3		2
Larynx		57	76		58
Lung		8	25		10
Breast	Insufficient Data				61
Uterus	Not Applicable				65
Ovary	Not Applicable				30
Kidney		35	62		38
Bladder		57	69		57
Prostate		49	62	Not Applicable	
Melanoma of Skin		55	75		63
Brain		22	23		28
Thyroid Gland		70	89		83
Reticulosarcoma		18			21
Lymphosarcoma		34			33
Hodgkin's Disease		32			40
Multiple Myeloma		8			10
Leukemia		16			18

Percent— 0 20 40 60 80 100
 ———— -All stages
 ———— -Localized
 - - - - -Regional
 *Adjusted for normal life expectancy Source: End Results in Cancer, Report No.3

**CANCER, SECOND LEADING CAUSE OF DEATH
IN THE UNITED STATES**

Rank	Cause of Death	Number of Deaths	Death Rate Per 100,000 Population	Percent of Total Deaths
	All Causes	1,851,323	935.6	100.0
1	Heart Diseases	720,892	364.3	38.9
2	Cancer	310,983	157.2	16.8
3	Stroke (Vascular Lesions)	202,184	102.2	10.9
4	Accidents	113,169	57.2	6.1
	Motor Vehicles Accidents	52,924	26.7	2.9
	All Other Accidents	60,245	30.4	3.2
5	Influenza and Pneumonia	56,892	28.8	3.1
6	Certain Diseases of Early Infancy	48,314	24.4	2.6
7	Arteriosclerosis	37,564	19.0	2.0
8	Diabetes Mellitus	35,049	17.7	1.9
9	Cirrhosis of Liver	27,816	14.1	1.5
10	Suicide	21,325	10.8	1.2
11	Emphysema without mention of Bronchitis	20,875	10.6	1.1
12	Congenital Malformations	17,328	8.8	1.0
13	Homicide	13,425	6.8	0.7
14	Hypertension without mention of Heart	11,151	5.6	0.6
15	Nephritis	10,941	5.5	0.6
	Other and Ill-Defined	203,415	102.8	11.0

Source: Vital Statistics of the United States, 1967

References

1. National Vital Statistics Division: *Vital Statistics of the United States*. Washington: U.S. Government Printing Office, Annual.
2. World Health Organization. *World Health Statistics Annual*. Geneva: W.H.O.
3. Linder, F. E., and Grove, R. D.: *Vital Statistics Rates in the United States, 1900-1940*. Washington: U.S. Government Printing Office, 1943. Pages 60-90.
4. Chronic Disease Control Section: *Cancer in Connecticut*. Hartford: Connecticut State Department of Health, Annual.
5. *Annual Report, Bureau of Cancer Control*. Albany: New York State Department of Health.
6. Seidman, H., and Kreiman, S. D.: *An Analysis of the Records of the Central Cancer Registry of the Calhoun County, Michigan Medical Society, 1949-1961*. New York: American Cancer Society, 1964.
7. Bailar, J. C., III, and Grant, R. N.: *The Third National Cancer Survey*. Ca 19: 228-231, 1969.

8. Berkson, J., and Gage, R. P.: *Calculations of survival rates for cancer*. Proc. Mayo Clin. 25: 270-286, 1950.
9. End Results Group, National Cancer Institute: *End Results in Cancer, Report No. 3*. Washington: U.S. Government Printing Office, 1968.
10. World Health Organization. *Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, 1965 Revision, Volumes 1 and 2*. Geneva: W.H.O., 1967.
11. National Center for Health Statistics: *International Classification of Diseases, Adapted for Use in the United States, Eighth Revision*. Public Health Service Publication No. 1693, Volumes 1 and 2. Washington: U.S. Government Printing Office, 1968.
12. American Cancer Society: *Manual of Tumor Nomenclature and Coding*. New York: The Society, 1951.
13. American Cancer Society: *Manual of Tumor Nomenclature and Coding, 1968 Edition*. New York: The Society, 1968.
14. College of American Pathologists: *Systematized Nomenclature of Pathology*. Chicago: The College, 1965.

MORTALITY, TEN LEADING CAUSES

	All Ages		Under 15		Age 15-34	
	Male	Female	Male	Female	Male	Female
1 Heart Diseases	415,851	Heart Diseases 305,417	Diseases of Infancy 28,251	Diseases of Infancy 20,048	Accidents 26,895	Accidents 6,606
2 Cancer	169,164	Cancer 141,819	Accidents 10,096	Congenital Malformations 6,516	Homicide 4,920	Cancer 3,120
3 Stroke	93,071	Stroke 109,113	Congenital Malformations 7,609	Accidents 5,603	Suicide 3,601	Suicide 1,462
4 Accidents	77,879	Accidents 35,290	Pneumonia, Influenza 4,435	Pneumonia, Influenza 3,423	Cancer 3,545	Heart Diseases 1,372
5 Pneumonia, Influenza	31,904	Pneumonia, Influenza 24,988	Cancer 2,343	Cancer 1,847	Heart Diseases 2,301	Homicide 1,329
6 Diseases of Infancy	28,261	Arterio-sclerosis 20,975	Gastritis, Colitis, Enteritis 788	Gastritis, Colitis, Enteritis 619	Pneumonia, Influenza 833	Stroke 858
7 Cirrhosis of Liver	17,930	Diabetes 20,628	Meningitis 659	Meningitis 455	Stroke 713	Complications of Pregnancy 717
8 Emphysema	17,920	Diseases of Infancy 20,053	Heart Diseases 502	Heart Diseases 412	Congenital Malformation 613	Pneumonia, Influenza 640
9 Arterio-sclerosis	16,589	Cirrhosis of Liver 9,886	Hernia, Intestinal Obstr. 481	Homicide 326	Cirrhosis of Liver 572	Cirrhosis of Liver 464
10 Suicide	15,187	Congenital Malformations 7,982	Homicide 360	Hernia, Intestinal Obstr. 319	Nephritis 525	Congenital Malformations 455

Source: Vital Statistics of the United States, 1967

OF DEATH, AGE GROUPS AND SEX

Age 35-54		Age 55-74		Age 75 and Over	
Male	Female	Male	Female	Male	Female
Heart Diseases 56,337	Cancer 29,268	Heart Diseases 205,642	Heart Diseases 110,124	Heart Diseases 150,962	Heart Diseases 175,740
Cancer 25,643	Heart Diseases 17,682	Cancer 93,587	Cancer 68,663	Stroke 48,427	Stroke 68,760
Accidents 17,844	Stroke 6,712	Stroke 36,876	Stroke 32,555	Cancer 44,029	Cancer 38,898
Cirrhosis of Liver 7,505	Accidents 5,786	Accidents 14,915	Diabetes 10,119	Pneumonia, Influenza 13,548	Arterio-sclerosis 17,697
Stroke 6,785	Cirrhosis of Liver 4,449	Emphysema 11,159	Accidents 7,325	Arterio-sclerosis 12,384	Pneumonia, Influenza 13,907
Suicide 5,661	Suicide 2,712	Pneumonia, Influenza 9,871	Pneumonia, Influenza 5,272	Accidents 8,061	Accidents 9,955
Homicide 3,657	Diabetes 1,894	Cirrhosis of Liver 8,672	Cirrhosis of Liver 4,149	Emphysema 5,404	Diabetes 8,153
Pneumonia, Influenza 3,204	Pneumonia, Influenza 1,737	Diabetes 7,251	Arterio-sclerosis 3,148	Diabetes 4,672	Hypertension w/o ment. heart 3,244
Diabetes 2,030	Homicide 1,096	Suicide 4,585	Infections of Kidney 1,895	Hyperplasia of Prostate 2,133	Hernia, Intestinal Obstr. 2,610
Nephritis 1,348	Nephritis 1,016	Arterio-sclerosis 3,958	Hernia, Intestinal Obstr. 1,877	Stomach or Duodenal Ulcer 2,043	Infections of Kidney 2,118

CANCER AROUND

Age-Adjusted Death Rates Per 100,000 Population for

Countries	All Sites		Oral		Colon and Rectum		Lung	
	Male	Female	Male	Female	Male	Female	Male	Female
United States	146.6 (18)	106.3 (20)	4.58 (8)	1.25 (12)	18.73 (11)	16.05 (10)	36.96 (10)	5.86 (14)
Australia	140.3 (22)	96.2 (26)	3.17 (19)	1.17 (14)	18.20 (13)	16.33 (9)	34.58 (15)	4.19 (25)
Austria	192.2 (3)	130.9 (3)	2.78 (23)	0.85 (25)	19.25 (9)	14.93 (13)	49.39 (6)	5.70 (15)
Belgium	175.8 (6)	119.8 (9)	2.73 (24)	0.67 (32)	21.43 (4)	18.00 (6)	46.72 (7)	4.41 (22)
Bulgaria	137.1 (25)	87.0 (29)	1.90 (32)	0.66 (34)	6.69 (29)	5.33 (32)	35.73 (13)	7.15 (5)
Canada	141.0 (21)	110.3 (15)	4.06 (12)	1.08 (19)	20.22 (7)	19.64 (3)	30.83 (18)	4.73 (19)
Chile	147.3 (17)	138.8 (1)	2.38 (26)	0.70 (31)	6.17 (30)	6.91 (26)	13.83 (29)	4.69 (20)
China: Taiwan	96.4 (34)	73.6 (35)	6.60 (5)	3.20 (2)	6.86 (28)	6.71 (27)	8.88 (34)	5.95 (12)
Czechoslovakia	195.7 (2)	121.0 (6)	3.21 (18)	0.92 (23)	16.05 (16)	10.82 (21)	56.41 (4)	5.92 (13)
Denmark	165.8 (11)	138.8 (2)	1.91 (31)	0.98 (21)	25.33 (1)	20.46 (2)	35.84 (12)	6.57 (8)
El Salvador	27.1 (38)	43.6 (37)	0.78 (39)	0.51 (38)	0.81 (39)	1.25 (38)	1.28 (39)	0.71 (39)
England, Wales	180.3 (5)	114.7 (11)	3.15 (20)	1.47 (9)	21.10 (6)	17.33 (7)	67.72 (2)	9.70 (3)
Finland	186.8 (4)	106.6 (19)	2.65 (25)	1.12 (17)	10.83 (24)	10.06 (23)	60.72 (3)	3.77 (29)
France	169.4 (10)	101.0 (23)	9.17 (2)	0.78 (28)	18.35 (12)	13.89 (15)	25.55 (24)	3.57 (30)
Germany (F.R.)	172.2 (7)	127.4 (4)	1.76 (34)	0.54 (37)	18.12 (14)	14.03 (14)	40.38 (8)	5.15 (17)
Greece	119.5 (28)	75.2 (32)	1.46 (37)	0.55 (36)	5.10 (34)	5.17 (33)	29.38 (20)	5.54 (16)
Hong Kong	159.9 (14)	94.5 (28)	17.95 (1)	6.29 (1)	11.22 (23)	7.88 (25)	29.80 (19)	14.57 (1)
Hungary	160.3 (13)	120.0 (7)	4.00 (13)	0.78 (27)	14.31 (19)	13.02 (17)	34.08 (16)	7.39 (4)
Ireland	139.4 (24)	111.9 (13)	4.33 (10)	2.07 (6)	20.13 (8)	16.74 (8)	28.88 (21)	7.01 (6)
Israel	117.5 (29)	115.6 (10)	1.53 (36)	0.81 (26)	10.53 (25)	10.06 (24)	20.83 (26)	6.75 (7)
Italy	148.9 (15)	100.6 (24)	5.44 (7)	0.88 (24)	13.40 (21)	10.77 (22)	27.57 (22)	4.34 (23)
Japan	140.2 (23)	94.7 (27)	1.37 (38)	0.66 (33)	8.06 (26)	6.62 (28)	12.64 (31)	4.46 (21)
Mexico	53.0 (36)	74.2 (33)	1.54 (35)	0.64 (35)	2.50 (37)	3.73 (36)	6.50 (35)	3.57 (31)
Netherlands	171.8 (8)	119.8 (8)	1.85 (33)	0.78 (30)	17.65 (15)	15.98 (11)	51.12 (5)	3.39 (32)
New Zealand	145.8 (19)	110.8 (14)	2.90 (22)	1.11 (18)	21.69 (3)	18.98 (4)	35.72 (14)	4.92 (18)
Nicaragua	22.0 (40)	37.3 (39)	0.18 (40)	0.11 (40)	0.43 (40)	0.39 (40)	0.40 (40)	0.51 (40)
Northern Ireland	148.8 (16)	109.7 (17)	3.91 (14)	2.36 (5)	21.17 (5)	18.03 (5)	39.49 (9)	6.30 (10)
Norway	127.8 (26)	98.3 (25)	3.03 (21)	1.15 (16)	13.84 (20)	11.46 (19)	13.89 (28)	2.57 (34)
Panama	77.9 (35)	74.2 (34)	2.07 (29)	1.77 (8)	5.69 (32)	4.66 (34)	5.44 (36)	1.94 (37)
Philippines	43.1 (37)	38.2 (38)	4.09 (11)	2.82 (4)	2.99 (36)	2.30 (37)	3.99 (37)	2.12 (36)
Poland	141.1 (20)	104.5 (22)	3.45 (17)	0.98 (22)	7.49 (27)	6.35 (29)	26.68 (23)	4.25 (24)
Portugal	110.0 (31)	83.0 (30)	4.57 (9)	1.07 (20)	11.48 (22)	11.35 (20)	10.09 (33)	2.19 (35)
Puerto Rico	117.3 (30)	82.4 (31)	8.73 (3)	2.05 (7)	6.02 (31)	5.80 (31)	10.95 (32)	4.05 (26)
Scotland	201.4 (1)	125.8 (5)	3.59 (16)	1.44 (11)	25.12 (2)	20.73 (1)	75.55 (1)	11.44 (2)
South Africa	169.9 (9)	112.6 (12)	5.92 (6)	1.23 (13)	14.99 (18)	15.30 (12)	36.71 (11)	6.52 (9)
Sweden	127.5 (27)	106.3 (21)	2.27 (27)	1.47 (10)	16.05 (17)	13.47 (16)	16.44 (27)	3.78 (28)
Switzerland	163.9 (12)	109.8 (16)	6.95 (4)	0.78 (29)	19.03 (10)	12.14 (18)	33.39 (17)	3.28 (33)
Thailand	22.2 (39)	14.6 (40)	2.20 (28)	1.16 (15)	1.32 (38)	0.84 (39)	2.13 (38)	0.85 (38)
Venezuela	98.7 (33)	108.1 (18)	3.59 (15)	3.05 (3)	4.76 (35)	5.92 (30)	12.92 (30)	5.99 (11)
Yugoslavia	98.7 (32)	71.9 (36)	2.04 (30)	0.47 (39)	5.37 (33)	4.41 (35)	21.78 (25)	3.87 (27)

NOTE: Figures in parentheses are order of rank within site and sex group.

THE WORLD

Selected Cancer Sites for 40 Countries – 1964-1965

Breast		Uterus		Skin		Stomach		Prostate	Leukemia	
Female	Female	Male	Female	Male	Female	Male	Male	Male	Female	
21.55 (10)	11.83 (20)	2.52 (5)	1.49 (15)	10.45 (35)	5.13 (37)	13.83 (10)	7.33 (4)	4.78 (8)		
19.08 (14)	8.40 (31)	4.30 (2)	2.35 (1)	15.48 (33)	7.95 (35)	14.80 (7)	6.67 (11)	4.32 (17)		
17.06 (17)	17.75 (5)	1.96 (11)	1.57 (11)	42.11 (6)	23.62 (4)	13.79 (11)	5.50 (24)	4.31 (18)		
21.13 (12)	11.95 (19)	1.41 (27)	0.95 (31)	27.13 (14)	15.27 (14)	15.05 (6)	5.80 (21)	4.41 (15)		
8.88 (27)	6.97 (35)	1.44 (26)	1.04 (28)	40.56 (7)	26.67 (3)	5.78 (31)	5.04 (26)	3.61 (28)		
23.49 (5)	10.69 (22)	1.87 (14)	1.18 (24)	17.56 (30)	8.13 (34)	13.78 (13)	6.84 (10)	4.75 (9)		
8.77 (28)	19.93 (3)	0.90 (32)	0.88 (32)	58.43 (2)	39.02 (1)	7.99 (27)	3.98 (29)	2.69 (33)		
4.04 (36)	15.56 (9)	1.56 (21)	1.54 (12)	22.45 (22)	12.77 (23)	1.03 (37)	2.31 (35)	1.56 (36)		
14.89 (21)	13.10 (12)	2.39 (6)	1.74 (7)	42.74 (5)	22.59 (6)	9.18 (24)	6.52 (13)	4.27 (19)		
23.73 (3)	17.61 (6)	1.84 (16)	1.99 (4)	21.76 (25)	13.39 (20)	15.61 (5)	8.58 (1)	5.41 (2)		
0.93 (38)	7.24 (34)	0.77 (35)	0.99 (30)	7.68 (37)	6.76 (36)	0.81 (38)	1.68 (39)	1.37 (38)		
24.42 (2)	10.20 (26)	1.45 (24)	1.29 (20)	23.42 (21)	11.46 (28)	12.13 (18)	5.51 (23)	3.96 (22)		
13.50 (22)	10.40 (24)	1.96 (12)	0.99 (29)	39.66 (8)	20.38 (10)	11.11 (21)	7.06 (5)	5.16 (5)		
16.26 (19)	11.30 (21)	1.69 (18)	1.33 (19)	21.44 (26)	10.63 (29)	14.37 (8)	6.37 (14)	4.49 (13)		
17.53 (16)	12.69 (14)	1.88 (13)	1.40 (16)	37.05 (9)	20.69 (9)	12.70 (15)	6.06 (17)	4.37 (16)		
7.97 (30)	6.60 (36)	1.05 (31)	0.88 (33)	16.49 (32)	10.04 (30)	4.83 (32)	7.01 (6)	5.14 (6)		
9.56 (26)	12.06 (18)	0.36 (38)	0.39 (38)	21.33 (27)	12.27 (25)	2.77 (34)	3.18 (32)	2.85 (32)		
13.47 (23)	19.12 (4)	2.18 (8)	1.86 (6)	42.74 (4)	23.18 (5)	13.02 (14)	5.82 (20)	4.03 (21)		
21.51 (11)	7.75 (33)	2.72 (4)	1.71 (8)	23.88 (20)	15.94 (13)	11.40 (19)	6.20 (15)	4.12 (20)		
20.98 (13)	6.18 (37)	1.26 (30)	1.68 (9)	18.20 (29)	12.58 (24)	8.45 (26)	7.37 (3)	5.67 (1)		
15.73 (20)	13.00 (13)	1.68 (19)	1.15 (26)	33.61 (10)	17.81 (12)	9.44 (23)	6.19 (16)	4.54 (11)		
3.80 (37)	13.47 (11)	0.83 (34)	0.57 (35)	68.57 (1)	35.31 (2)	1.85 (35)	3.72 (30)	2.87 (30)		
4.31 (35)	20.66 (2)	0.64 (36)	0.67 (34)	9.67 (36)	8.89 (31)	4.54 (33)	2.07 (36)	1.91 (35)		
25.59 (1)	10.13 (27)	1.52 (22)	1.17 (25)	28.26 (13)	15.18 (15)	14.18 (9)	6.98 (7)	4.98 (7)		
23.28 (6)	10.29 (25)	2.97 (3)	2.28 (2)	16.54 (31)	8.33 (33)	13.21 (12)	6.67 (12)	5.35 (3)		
– (40)	2.15 (40)	– (40)	0.20 (39)	1.31 (40)	0.70 (40)	0.65 (39)	1.80 (38)	1.36 (39)		
22.44 (8)	7.96 (32)	1.50 (23)	1.36 (17)	21.87 (24)	13.59 (19)	12.47 (17)	5.98 (19)	3.70 (26)		
16.89 (18)	9.13 (30)	1.99 (10)	1.51 (13)	26.01 (17)	14.63 (17)	16.47 (3)	6.97 (8)	4.57 (10)		
7.80 (31)	15.61 (8)	1.32 (29)	1.19 (22)	13.45 (34)	8.83 (32)	7.90 (28)	2.90 (34)	2.42 (34)		
4.53 (34)	4.67 (38)	0.57 (37)	0.55 (36)	6.18 (38)	4.64 (38)	1.19 (36)	2.03 (37)	1.54 (37)		
10.37 (25)	15.92 (7)	1.67 (20)	1.50 (14)	44.18 (3)	21.17 (8)	7.34 (29)	5.19 (25)	3.84 (23)		
12.57 (24)	12.37 (17)	1.45 (25)	1.19 (23)	32.95 (11)	19.65 (11)	11.15 (20)	4.94 (27)	3.83 (25)		
6.46 (33)	15.21 (10)	0.87 (33)	0.48 (37)	27.12 (15)	13.20 (21)	9.97 (22)	3.66 (31)	3.62 (27)		
23.59 (4)	10.66 (23)	1.82 (17)	1.34 (18)	25.47 (18)	14.50 (18)	12.67 (16)	5.65 (22)	3.83 (24)		
22.72 (7)	12.51 (15)	4.38 (1)	2.03 (3)	25.27 (19)	13.00 (22)	18.64 (1)	6.96 (9)	4.54 (12)		
18.50 (15)	9.95 (28)	1.85 (15)	1.28 (21)	22.04 (23)	12.03 (26)	17.80 (2)	7.63 (2)	5.25 (4)		
21.63 (9)	12.46 (16)	2.33 (7)	1.62 (10)	26.04 (16)	14.90 (16)	15.77 (4)	6.01 (18)	4.44 (14)		
0.78 (39)	2.26 (39)	0.03 (39)	0.03 (40)	1.82 (39)	0.83 (39)	0.01 (40)	0.20 (40)	0.16 (40)		
8.38 (29)	27.42 (1)	2.10 (9)	1.91 (5)	30.08 (12)	21.77 (7)	8.91 (25)	3.04 (33)	2.87 (31)		
7.56 (32)	9.39 (29)	1.32 (28)	1.05 (27)	21.10 (28)	11.95 (27)	5.78 (30)	4.18 (28)	3.07 (29)		

Source: Segi, Mitsuo, et al., Cancer Mortality for Selected Sites, No. 5.