

Table A.1

Number of Incidence Cases, 2008-2012

By Primary Cancer Site, Race and Sex
18 SEER Geographic Areas

Site	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	50,243	35,114	15,129	41,512	29,211	12,301	4,477	3,116	1,361
Esophagus	19,533	15,247	4,286	16,405	13,036	3,369	2,063	1,428	635
Stomach	32,533	19,727	12,806	23,127	14,510	8,617	4,512	2,508	2,004
Colon & Rectum	187,380	96,805	90,575	146,946	76,322	70,624	22,573	11,185	11,388
Colon	132,251	65,276	66,975	104,210	51,678	52,532	16,538	7,911	8,627
Rectum	55,129	31,529	23,600	42,736	24,644	18,092	6,035	3,274	2,761
Liver & IBD ^a	37,716	27,263	10,453	26,587	19,334	7,253	4,815	3,570	1,245
Pancreas	54,521	27,483	27,038	43,624	22,282	21,342	6,548	3,117	3,431
Larynx	14,778	11,882	2,896	11,920	9,575	2,345	2,178	1,729	449
Lung & Bronchus	256,093	134,952	121,141	211,505	109,948	101,557	28,273	15,897	12,376
Melanoma of the skin	95,285	56,026	39,259	89,405	52,932	36,473	466	211	255
Breast	300,730	2,412	298,318	240,913	1,937	238,976	32,721	317	32,404
Cervix uteri	17,107	-	17,107	12,813	-	12,813	2,426	-	2,426
Corpus & Uterus, NOS	61,774	-	61,774	49,785	-	49,785	6,196	-	6,196
Ovary ^b	29,084	-	29,084	24,044	-	24,044	2,491	-	2,491
Prostate	287,020	287,020	-	219,580	219,580	-	42,033	42,033	-
Testis	11,956	11,956	-	10,704	10,704	-	380	380	-
Urinary bladder	88,150	66,730	21,420	78,166	59,607	18,559	5,003	3,418	1,585
Kidney & Renal pelvis	69,802	43,951	25,851	57,007	36,052	20,955	8,292	5,050	3,242
Brain & ONS ^a	28,221	15,776	12,445	24,297	13,673	10,624	2,033	1,068	965
Thyroid	59,113	14,208	44,905	47,997	11,946	36,051	3,949	745	3,204
Hodgkin lymphoma	11,615	6,325	5,290	9,396	5,138	4,258	1,439	766	673
Non-Hodgkin lymphoma	86,227	47,149	39,078	72,068	39,491	32,577	6,715	3,655	3,060
Myeloma	27,833	15,508	12,325	20,463	11,791	8,672	5,434	2,686	2,748
Leukemia	57,796	33,278	24,518	48,297	28,006	20,291	4,638	2,505	2,133
Acute lymphocytic	7,207	4,007	3,200	5,971	3,303	2,668	549	316	233
Chronic lymphocytic	19,914	11,978	7,936	17,249	10,377	6,872	1,285	747	538
Acute myeloid	17,132	9,262	7,870	14,016	7,720	6,296	1,525	741	784
Chronic myeloid	7,441	4,347	3,094	5,955	3,498	2,457	748	400	348
All others	6,102	3,684	2,418	5,106	3,108	1,998	531	301	230
Kaposi Sarcoma	2,269	2,055	214	1,493	1,338	155	578	537	41
Mesothelioma	4,276	3,267	1,009	3,902	2,997	905	217	157	60
All Sites	2,021,319	1,036,325	984,994	1,638,296	840,464	797,832	213,964	112,217	101,747

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^a IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

^b Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- Count not shown due to fewer than 16 cases during the time period.

Table A.1

Number of Incidence Cases, 2008-2012

By Primary Cancer Site, Race and Sex
18 SEER Geographic Areas

Site	Asian/Pacific Islander			American Indian/Alaska Native ^a			Hispanic ^b		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	3,264	2,119	1,145	241	165	76	3,917	2,671	1,246
Esophagus	862	641	221	81	59	22	1,465	1,182	283
Stomach	4,405	2,442	1,963	228	126	102	5,699	3,243	2,456
Colon & Rectum	14,781	7,625	7,156	1,014	532	482	19,005	10,329	8,676
Colon	9,624	4,698	4,926	683	335	348	12,669	6,561	6,108
Rectum	5,157	2,927	2,230	331	197	134	6,336	3,768	2,568
Liver & IBD ^c	5,642	3,882	1,760	360	248	112	6,929	4,995	1,934
Pancreas	3,860	1,827	2,033	240	124	116	5,380	2,626	2,754
Larynx	493	422	71	58	48	-	1,153	998	155
Lung & Bronchus	14,470	8,135	6,335	909	466	443	14,225	7,528	6,697
Melanoma of the skin	558	293	265	112	45	67	2,739	1,228	1,511
Breast	23,178	132	23,046	1,231	-	1,227	30,568	162	30,406
Cervix uteri	1,499	-	1,499	126	-	126	3,754	-	3,754
Corpus & Uterus, NOS	4,880	-	4,880	314	-	314	6,868	-	6,868
Ovary ^d	2,220	-	2,220	144	-	144	3,660	-	3,660
Prostate	13,134	13,134	-	721	721	-	25,821	25,821	-
Testis	457	457	-	92	92	-	2,759	2,759	-
Urinary bladder	3,435	2,549	886	189	146	43	5,180	3,822	1,358
Kidney & Renal pelvis	3,411	2,153	1,258	502	300	202	8,935	5,302	3,633
Brain & ONS ^c	1,535	839	696	104	60	44	3,608	2,018	1,590
Thyroid	5,915	1,254	4,661	265	58	207	8,840	1,641	7,199
Hodgkin lymphoma	591	320	271	35	18	17	1,901	1,041	860
Non-Hodgkin lymphoma	5,537	2,966	2,571	321	171	150	10,110	5,428	4,682
Myeloma	1,488	799	689	108	53	55	3,039	1,668	1,371
Leukemia	3,193	1,781	1,412	247	129	118	7,328	4,049	3,279
Acute lymphocytic	547	312	235	53	27	26	2,579	1,404	1,175
Chronic lymphocytic	453	294	159	37	21	16	1,004	572	432
Acute myeloid	1,372	681	691	79	44	35	2,150	1,129	1,021
Chronic myeloid	503	320	183	52	22	30	914	537	377
All others	318	174	144	26	-	-	681	407	274
Kaposi Sarcoma	84	78	-	-	-	-	500	447	53
Mesothelioma	124	86	38	16	-	-	421	309	112
All Sites	126,993	57,695	69,298	8,297	3,870	4,427	198,799	96,246	102,553

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^a Incidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^c Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^d IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

^e Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- Count not shown due to fewer than 16 cases during the time period.

Table A.2

Standard Errors of Incidence Rates, 2008-2012

By Primary Cancer Site, Race and Sex
18 SEER Geographic Areas

Site	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	0.05	0.09	0.05	0.06	0.10	0.06	0.14	0.28	0.14
Esophagus	0.03	0.06	0.03	0.04	0.07	0.03	0.11	0.22	0.10
Stomach	0.04	0.07	0.05	0.04	0.08	0.05	0.17	0.32	0.19
Colon & Rectum	0.10	0.16	0.13	0.11	0.18	0.14	0.36	0.63	0.44
Colon	0.08	0.13	0.11	0.09	0.15	0.12	0.32	0.54	0.39
Rectum	0.05	0.09	0.06	0.06	0.10	0.07	0.18	0.31	0.21
Liver & IBD ^a	0.04	0.08	0.04	0.05	0.08	0.04	0.15	0.29	0.14
Pancreas	0.05	0.09	0.07	0.06	0.10	0.08	0.20	0.33	0.25
Larynx	0.03	0.05	0.02	0.03	0.06	0.03	0.10	0.23	0.08
Lung & Bronchus	0.12	0.20	0.15	0.13	0.22	0.17	0.41	0.78	0.47
Melanoma of the skin	0.07	0.12	0.09	0.09	0.15	0.11	0.05	0.09	0.07
Breast	0.12	0.03	0.23	0.14	0.03	0.27	0.41	0.11	0.70
Cervix uteri	0.03	-	0.06	0.03	-	0.07	0.11	-	0.19
Corpus & Uterus, NOS	0.05	-	0.10	0.06	-	0.12	0.18	-	0.31
Ovary ^b	0.04	-	0.07	0.04	-	0.08	0.12	-	0.20
Prostate	0.12	0.26	-	0.13	0.28	-	0.46	1.12	-
Testis	0.03	0.05	-	0.03	0.06	-	0.04	0.08	-
Urinary bladder	0.07	0.14	0.06	0.08	0.16	0.07	0.19	0.39	0.18
Kidney & Renal pelvis	0.06	0.10	0.07	0.07	0.12	0.08	0.21	0.38	0.23
Brain & ONS ^a	0.04	0.06	0.05	0.05	0.07	0.06	0.10	0.16	0.12
Thyroid	0.06	0.06	0.10	0.07	0.07	0.11	0.13	0.14	0.21
Hodgkin lymphoma	0.03	0.04	0.03	0.03	0.04	0.04	0.07	0.11	0.09
Non-Hodgkin lymphoma	0.07	0.11	0.08	0.08	0.13	0.10	0.18	0.32	0.22
Myeloma	0.04	0.07	0.05	0.04	0.07	0.05	0.18	0.31	0.22
Leukemia	0.06	0.10	0.07	0.06	0.11	0.08	0.16	0.29	0.19
Acute lymphocytic	0.02	0.03	0.03	0.02	0.04	0.03	0.04	0.07	0.05
Chronic lymphocytic	0.03	0.06	0.04	0.04	0.07	0.04	0.09	0.18	0.10
Acute myeloid	0.03	0.05	0.04	0.03	0.06	0.04	0.09	0.16	0.11
Chronic myeloid	0.02	0.03	0.02	0.02	0.04	0.03	0.06	0.11	0.07
All others	0.02	0.03	0.02	0.02	0.04	0.02	0.06	0.11	0.06
Kaposi Sarcoma	0.01	0.02	0.01	0.01	0.02	0.01	0.05	0.10	0.02
Mesothelioma	0.02	0.03	0.01	0.02	0.04	0.02	0.04	0.09	0.03
All Sites	0.32	0.52	0.42	0.37	0.58	0.48	1.07	1.90	1.29

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^a IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

^b Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table A.2

Standard Errors of Incidence Rates, 2008-2012

By Primary Cancer Site, Race and Sex
18 SEER Geographic Areas

Site	Asian/Pacific Islander			American Indian/Alaska Native ^a			Hispanic ^b		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	0.14	0.25	0.15	0.60	1.14	0.62	0.12	0.22	0.12
Esophagus	0.07	0.15	0.07	0.37	0.72	0.36	0.08	0.16	0.06
Stomach	0.17	0.30	0.20	0.68	1.22	0.78	0.15	0.27	0.18
Colon & Rectum	0.30	0.50	0.37	1.35	2.23	1.70	0.28	0.47	0.33
Colon	0.25	0.40	0.31	1.16	1.90	1.49	0.23	0.39	0.29
Rectum	0.17	0.30	0.20	0.69	1.16	0.83	0.15	0.26	0.17
Liver & IBD ^c	0.19	0.35	0.19	0.77	1.40	0.83	0.16	0.29	0.16
Pancreas	0.16	0.26	0.21	0.68	1.10	0.86	0.16	0.25	0.20
Larynx	0.06	0.12	0.04	0.32	0.67	-	0.07	0.15	0.05
Lung & Bronchus	0.31	0.56	0.36	1.41	2.41	1.71	0.27	0.47	0.32
Melanoma of the skin	0.06	0.10	0.07	0.40	0.56	0.58	0.09	0.15	0.12
Breast	0.35	0.06	0.64	1.33	-	2.43	0.30	0.06	0.55
Cervix uteri	0.09	-	0.16	0.36	-	0.69	0.09	-	0.17
Corpus & Uterus, NOS	0.16	-	0.29	0.62	-	1.16	0.14	-	0.26
Ovary ^d	0.11	-	0.20	0.49	-	0.88	0.11	-	0.19
Prostate	0.29	0.66	-	1.17	2.72	-	0.33	0.76	-
Testis	0.05	0.09	-	0.25	0.51	-	0.05	0.10	-
Urinary bladder	0.16	0.32	0.14	0.67	1.43	0.54	0.16	0.34	0.14
Kidney & Renal pelvis	0.14	0.26	0.16	0.90	1.58	1.03	0.17	0.31	0.20
Brain & ONS ^c	0.09	0.15	0.12	0.34	0.52	0.43	0.09	0.15	0.11
Thyroid	0.17	0.18	0.29	0.55	0.51	0.93	0.13	0.13	0.22
Hodgkin lymphoma	0.05	0.09	0.07	0.20	0.29	0.25	0.06	0.09	0.07
Non-Hodgkin lymphoma	0.19	0.31	0.23	0.76	1.25	0.95	0.19	0.31	0.24
Myeloma	0.10	0.17	0.12	0.45	0.70	0.60	0.11	0.19	0.14
Leukemia	0.14	0.24	0.17	0.59	1.05	0.70	0.14	0.24	0.17
Acute lymphocytic	0.06	0.09	0.07	0.20	0.28	0.28	0.05	0.07	0.07
Chronic lymphocytic	0.05	0.10	0.06	0.28	0.53	0.32	0.07	0.12	0.08
Acute myeloid	0.09	0.15	0.12	0.34	0.60	0.40	0.08	0.14	0.10
Chronic myeloid	0.05	0.10	0.06	0.24	0.43	0.31	0.05	0.09	0.06
All others	0.05	0.08	0.05	0.23	-	-	0.05	0.09	0.06
Kaposi Sarcoma	0.02	0.04	-	-	-	-	0.03	0.07	0.03
Mesothelioma	0.03	0.06	0.03	0.22	-	-	0.05	0.10	0.04
All Sites	0.88	1.40	1.14	3.76	6.09	4.87	0.84	1.41	1.05

Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^a Incidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^c Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^d IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

- Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table A.3

Number of Deaths, 2008-2012

By Primary Cancer Site, Race and Sex
United States

Site	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	41,996	29,161	12,835	35,186	24,221	10,965	5,178	3,838	1,340
Esophagus	71,207	56,503	14,704	62,797	50,397	12,400	6,966	5,024	1,942
Stomach	56,152	33,258	22,894	41,803	24,938	16,865	9,997	5,870	4,127
Colon & Rectum	260,049	134,482	125,567	216,940	112,485	104,455	34,433	17,557	16,876
Liver & IBD ^a	102,449	69,183	33,266	80,579	54,042	26,537	14,249	10,038	4,211
Pancreas	183,891	92,683	91,208	156,545	79,800	76,745	21,609	10,138	11,471
Larynx	18,475	14,640	3,835	14,972	11,807	3,165	3,167	2,546	621
Lung & Bronchus	789,297	437,358	351,939	687,049	377,533	309,516	82,610	48,514	34,096
Melanoma of the skin	45,355	29,680	15,675	44,358	29,191	15,167	662	314	348
Breast	206,466	2,124	204,342	170,423	1,746	168,677	30,449	339	30,110
Cervix uteri	20,022	-	20,022	15,073	-	15,073	4,006	-	4,006
Corpus & Uterus, NOS	41,342	-	41,342	32,682	-	32,682	7,335	-	7,335
Ovary	72,120	-	72,120	63,495	-	63,495	6,391	-	6,391
Prostate	140,333	140,333	-	114,132	114,132	-	23,487	23,487	-
Testis	1,899	1,899	-	1,740	1,740	-	107	107	-
Urinary bladder	73,226	51,741	21,485	66,756	47,908	18,848	5,248	2,983	2,265
Kidney & Renal pelvis	66,186	42,367	23,819	58,168	37,404	20,764	6,204	3,786	2,418
Brain & ONS ^a	71,831	40,315	31,516	65,562	36,929	28,633	4,504	2,398	2,106
Thyroid	8,479	3,703	4,776	7,214	3,272	3,942	785	261	524
Hodgkin lymphoma	5,950	3,369	2,581	5,195	2,930	2,265	635	362	273
Non-Hodgkin lymphoma	101,756	55,783	45,973	91,574	50,262	41,312	7,244	3,950	3,294
Myeloma	55,550	30,045	25,505	44,586	24,580	20,006	9,651	4,749	4,902
Leukemia	114,295	65,373	48,922	101,552	58,503	43,049	9,585	5,141	4,444
Acute lymphocytic	7,123	4,001	3,122	6,217	3,489	2,728	594	340	254
Chronic lymphocytic	22,644	13,630	9,014	20,573	12,383	8,190	1,855	1,102	753
Acute myeloid	46,310	26,183	20,127	41,089	23,509	17,580	3,571	1,818	1,753
Chronic myeloid	5,130	2,873	2,257	4,413	2,465	1,948	565	316	249
All others	33,088	18,686	14,402	29,260	16,657	12,603	3,000	1,565	1,435
All Sites	2,867,104	1,500,932	1,366,172	2,453,776	1,288,718	1,165,058	328,717	168,826	159,891

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^a IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

- Count not shown due to fewer than 16 cases during the time period.

Table A.3

Number of Deaths, 2008-2012

By Primary Cancer Site, Race and Sex
United States

Site	Asian/Pacific Islander			American Indian/Alaska Native ^a			Hispanic ^b		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	1,394	933	461	164	121	43	2,057	1,487	570
Esophagus	1,132	847	285	226	163	63	3,029	2,464	565
Stomach	3,926	2,183	1,743	340	212	128	7,461	4,247	3,214
Colon & Rectum	7,172	3,670	3,502	1,106	563	543	15,723	8,804	6,919
Liver & IBD ^c	6,728	4,509	2,219	663	442	221	12,013	8,110	3,903
Pancreas	4,955	2,342	2,613	560	280	280	10,866	5,529	5,337
Larynx	241	212	29	61	50	-	1,045	911	134
Lung & Bronchus	15,898	9,244	6,654	2,465	1,342	1,123	24,842	15,300	9,542
Melanoma of the skin	241	120	121	70	44	26	1,068	626	442
Breast	4,738	32	4,706	589	-	583	11,764	77	11,687
Cervix uteri	744	-	744	152	-	152	2,425	-	2,425
Corpus & Uterus, NOS	1,147	-	1,147	133	-	133	2,705	-	2,705
Ovary	1,871	-	1,871	249	-	249	4,277	-	4,277
Prostate	2,097	2,097	-	422	422	-	7,575	7,575	-
Testis	32	32	-	19	19	-	366	366	-
Urinary bladder	1,012	705	307	134	98	36	2,627	1,785	842
Kidney & Renal pelvis	1,280	842	438	430	270	160	4,648	2,945	1,703
Brain & ONS ^c	1,462	816	646	209	124	85	4,605	2,553	2,052
Thyroid	446	155	291	25	-	16	766	292	474
Hodgkin lymphoma	104	64	40	-	-	-	627	380	247
Non-Hodgkin lymphoma	2,579	1,362	1,217	275	159	116	6,633	3,625	3,008
Myeloma	1,073	590	483	164	85	79	3,469	1,856	1,613
Leukemia	2,713	1,474	1,239	305	180	125	7,320	4,058	3,262
Acute lymphocytic	258	147	111	39	18	21	1,524	834	690
Chronic lymphocytic	158	106	52	34	25	-	556	317	239
Acute myeloid	1,448	741	707	136	79	57	2,752	1,486	1,266
Chronic myeloid	132	75	57	16	-	-	386	228	158
All others	717	405	312	80	44	36	2,102	1,193	909
All Sites	70,384	35,923	34,461	10,080	5,264	4,816	156,430	82,536	73,894

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^a Mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.^c IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

- Count not shown due to fewer than 16 cases during the time period.

Table A.4
Standard Errors of Death Rates, 2008-2012
By Primary Cancer Site, Race and Sex
United States

Site	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	0.01	0.02	0.01	0.01	0.02	0.01	0.04	0.09	0.04
Esophagus	0.02	0.03	0.01	0.02	0.04	0.01	0.05	0.11	0.05
Stomach	0.01	0.03	0.02	0.01	0.03	0.02	0.07	0.13	0.07
Colon & Rectum	0.03	0.05	0.04	0.03	0.05	0.04	0.12	0.22	0.14
Liver & IBD ^a	0.02	0.03	0.02	0.02	0.04	0.02	0.07	0.13	0.07
Pancreas	0.03	0.04	0.03	0.03	0.05	0.03	0.09	0.16	0.12
Larynx	0.01	0.02	0.01	0.01	0.02	0.01	0.03	0.08	0.03
Lung & Bronchus	0.05	0.09	0.06	0.06	0.10	0.07	0.18	0.36	0.20
Melanoma of the skin	0.01	0.02	0.01	0.02	0.03	0.02	0.02	0.03	0.02
Breast	0.03	0.01	0.05	0.03	0.01	0.05	0.11	0.03	0.18
Cervix uteri	0.01	-	0.02	0.01	-	0.02	0.04	-	0.06
Corpus & Uterus, NOS	0.01	-	0.02	0.01	-	0.02	0.05	-	0.09
Ovary	0.02	-	0.03	0.02	-	0.03	0.05	-	0.08
Prostate	0.02	0.06	-	0.02	0.06	-	0.11	0.32	-
Testis	0.00	0.01	-	0.00	0.01	-	0.01	0.01	-
Urinary bladder	0.02	0.03	0.02	0.02	0.04	0.02	0.05	0.10	0.05
Kidney & Renal pelvis	0.02	0.03	0.02	0.02	0.03	0.02	0.05	0.10	0.05
Brain & ONS ^a	0.02	0.03	0.02	0.02	0.03	0.02	0.04	0.07	0.05
Thyroid	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.03	0.02
Hodgkin lymphoma	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Non-Hodgkin lymphoma	0.02	0.03	0.02	0.02	0.04	0.03	0.05	0.10	0.06
Myeloma	0.01	0.02	0.02	0.01	0.03	0.02	0.07	0.12	0.08
Leukemia	0.02	0.04	0.02	0.02	0.04	0.03	0.06	0.12	0.07
Acute lymphocytic	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Chronic lymphocytic	0.01	0.02	0.01	0.01	0.02	0.01	0.03	0.06	0.03
Acute myeloid	0.01	0.02	0.02	0.01	0.03	0.02	0.04	0.07	0.04
Chronic myeloid	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.03	0.02
All others	0.01	0.02	0.01	0.01	0.02	0.01	0.04	0.07	0.04
All Sites	0.10	0.17	0.13	0.11	0.18	0.14	0.36	0.69	0.42

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^a IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table A.4
Standard Errors of Death Rates, 2008-2012
By Primary Cancer Site, Race and Sex
United States

Site	Asian/Pacific Islander			American Indian/Alaska Native ^a			Hispanic ^b		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Oral Cavity & Pharynx	0.05	0.10	0.06	0.19	0.37	0.19	0.04	0.07	0.03
Esophagus	0.05	0.10	0.05	0.25	0.49	0.23	0.04	0.09	0.03
Stomach	0.10	0.18	0.11	0.31	0.57	0.33	0.07	0.12	0.08
Colon & Rectum	0.13	0.23	0.16	0.55	0.89	0.70	0.10	0.18	0.12
Liver & IBD ^c	0.12	0.23	0.13	0.41	0.74	0.45	0.09	0.16	0.09
Pancreas	0.11	0.18	0.15	0.39	0.62	0.49	0.09	0.14	0.11
Larynx	0.03	0.06	0.02	0.12	0.27	-	0.03	0.06	0.02
Lung & Bronchus	0.20	0.37	0.23	0.84	1.47	1.00	0.13	0.25	0.14
Melanoma of the skin	0.02	0.04	0.03	0.13	0.26	0.13	0.03	0.05	0.03
Breast	0.10	0.02	0.17	0.37	-	0.65	0.08	0.02	0.14
Cervix uteri	0.04	-	0.07	0.16	-	0.29	0.03	-	0.06
Corpus & Uterus, NOS	0.05	-	0.09	0.18	-	0.32	0.04	-	0.07
Ovary	0.06	-	0.11	0.26	-	0.45	0.05	-	0.09
Prostate	0.08	0.21	-	0.41	1.07	-	0.08	0.21	-
Testis	0.01	0.01	-	0.04	0.08	-	0.01	0.02	-
Urinary bladder	0.06	0.12	0.05	0.21	0.47	0.19	0.05	0.10	0.04
Kidney & Renal pelvis	0.06	0.10	0.06	0.34	0.58	0.39	0.05	0.10	0.06
Brain & ONS ^c	0.05	0.09	0.06	0.19	0.32	0.22	0.05	0.08	0.06
Thyroid	0.03	0.04	0.05	0.09	-	0.12	0.02	0.03	0.03
Hodgkin lymphoma	0.02	0.03	0.02	-	-	-	0.02	0.03	0.02
Non-Hodgkin lymphoma	0.08	0.14	0.10	0.29	0.51	0.35	0.07	0.12	0.08
Myeloma	0.05	0.09	0.06	0.22	0.39	0.27	0.05	0.09	0.06
Leukemia	0.08	0.14	0.09	0.29	0.57	0.30	0.06	0.11	0.07
Acute lymphocytic	0.02	0.03	0.03	0.06	0.09	0.08	0.02	0.03	0.03
Chronic lymphocytic	0.02	0.04	0.02	0.12	0.28	-	0.02	0.04	0.02
Acute myeloid	0.06	0.10	0.07	0.19	0.35	0.21	0.04	0.07	0.05
Chronic myeloid	0.02	0.03	0.02	0.07	-	-	0.01	0.03	0.02
All others	0.04	0.08	0.05	0.15	0.31	0.16	0.04	0.07	0.04
All Sites	0.42	0.71	0.50	1.67	2.88	2.02	0.32	0.56	0.38

Source: US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^a Mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^c IBD = Intrahepatic Bile Duct. ONS = Other Nervous System.

- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table A.5

SEER Site Recode ICD-O-3/WHO 2008 Definition^{ab}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	Recode
Oral Cavity and Pharynx			
Lip	C000-C009		20010
Tongue	C019-C029		20020
Salivary Gland	C079-C089		20030
Floor of Mouth	C040-C049		20040
Gum and Other Mouth	C030-C039, C050-C059, C060-C069	excluding 9050-9055, 9140, 9590-9992	20050
Nasopharynx	C110-C119		20060
Tonsil	C090-C099		20070
Oropharynx	C100-C109		20080
Hypopharynx	C129, C130-C139		20090
Other Oral Cavity and Pharynx	C140, C142-C148		20100
Digestive System			
Esophagus	C150-C159	excluding 9050-9055, 9140, 9590-9992	21010
Stomach	C160-C169		21020
Small Intestine	C170-C179		21030
Colon and Rectum			
Colon excluding Rectum			
Cecum	C180		21041
Appendix	C181		21042
Ascending Colon	C182		21043
Hepatic Flexure	C183	excluding 9050-9055, 9140, 9590-9992	21044
Transverse Colon	C184		21045
Splenic Flexure	C185		21046
Descending Colon	C186		21047
Sigmoid Colon	C187		21048
Large Intestine, NOS	C188-C189, C260		21049
Rectum and Rectosigmoid Junction			
Rectosigmoid Junction	C199	excluding 9050-9055, 9140, 9590-9992	21051
Rectum	C209		21052
Anus, Anal Canal and Anorectum	C210-C212, C218		21060
Liver and Intrahepatic Bile Duct			
Liver	C220		21071
Intrahepatic Bile Duct	C221		21072
Gallbladder	C239	excluding 9050-9055, 9140, 9590-9992	21080
Other Biliary	C240-C249		21090
Pancreas	C250-C259		21100
Retroperitoneum	C480		21110
Peritoneum, Omentum and Mesentery	C481-C482		21120
Other Digestive Organs	C268-C269, C488		21130
Respiratory System			
Nose, Nasal Cavity and Middle Ear	C300-C301, C310-C319		22010
Larynx	C320-C329		22020
Lung and Bronchus	C340-C349	excluding 9050-9055, 9140, 9590-9992	22030
Pleura	C384		22050
Trachea, Mediastinum and Other Respiratory Organs	C339, C381-C383, C388 C390, C398, C399		22060
Bones and Joints	C400-C419	excluding 9050-9055, 9140, 9590-9992	23000
Soft Tissue including Heart	C380, C470-C479, C490-C499	excluding 9050-9055, 9140, 9590-9992	24000
Skin excluding Basal and Squamous			
Melanoma of the Skin	C440-C449	8720-8790	25010
Other Non-Epithelial Skin	C440-C449	excluding 8000-8005, 8010-8046, 8050-8084, 8090-8110, 8720-8790, 9050-9055, 9140, 9590-9992	25020
Breast	C500-C509	excluding 9050-9055, 9140, 9590-9992	26000
Female Genital System			
Cervix Uteri	C530-C539		27010
Corpus and Uterus, NOS			
Corpus Uteri	C540-C549		27020
Uterus, NOS	C559	excluding 9050-9055, 9140, 9590-9992	27030
Ovary	C569		27040
Vagina	C529		27050
Vulva	C510-C519		27060
Other Female Genital Organs	C570-C589		27070

^a This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^b Subject to change based on evolving ICD-O-3 coding rules.

Table A.5 - continued

SEER Site Recode ICD-O-3/WHO 2008 Definition^{ab}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)	Recode
Male Genital System			
Prostate	C619		28010
Testis	C620-C629	excluding 9050-9055, 9140,	28020
Penis	C600-C609	9590-9992	28030
Other Male Genital Organs	C630-C639		28040
Urinary System			
Urinary Bladder	C670-C679		29010
Kidney and Renal Pelvis	C649, C659	excluding 9050-9055, 9140,	29020
Ureter	C669	9590-9992	29030
Other Urinary Organs	C680-C689		29040
Eye and Orbit	C690-C699	excluding 9050-9055, 9140,	30000
		9590-9992	
Brain and Other Nervous System			
Brain	C710-C719	excluding 9050-9055, 9140,	31010
		9530-9539, 9590-9992	
Cranial Nerves Other	C710-C719	9530-9539	31040
Nervous System	C700-C709, C720-C729	excluding 9050-9055, 9140,	
		9590-9992	
Endocrine System			
Thyroid	C739	excluding 9050-9055, 9140,	32010
Other Endocrine including Thymus	C379, C740-C749, C750-C759	9590-9992	32020
Lymphoma			
Hodgkin Lymphoma			
Hodgkin - Nodal	C024, C098-C099, C111, C142 C379, C422, C770-C779	9650-9667	33011
Hodgkin - Extranodal	All other sites		33012
Non-Hodgkin Lymphoma			
NHL - Nodal	C024, C098-C099, C111, C142, C379, C422, C770-C779	9590-9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687-9691, 9695, 9698-9702, 9705, 9708-9709, 9712, 9714-9719, 9724-9729, 9735, 9737- 9738, 9811-9818, 9823, 9827, 9837	33041
NHL - Extranodal	All sites except C024, C098- C099, C111, C142, C379, C422, C770-C779	9590-9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687-9691, 9695, 9698-9702, 9705, 9708-9709, 9712, 9714-9719, 9724-9729, 9735, 9737-9738	33042
	All sites except C024, C098- C099, C111, C142, C379, C420-C422, C424, C770-C779	9811-9818, 9823, 9827, 9837	
Myeloma		9731-9732, 9734	34000
Leukemia			
Lymphocytic Leukemia			
Acute Lymphocytic Leukemia		9826, 9835-9836	35011
	C420-C421, C424	9811-9818, 9837	
Chronic Lymphocytic Leukemia	C420-C421, C424	9823	35012
Other Lymphocytic Leukemia		9820, 9832-9834, 9940	35013
Myeloid and Monocytic Leukemia			
Acute Myeloid Leukemia		9840, 9861, 9865-9867, 9869, 9871- 9874, 9895-9898, 9910-9911, 9920	35021
Acute Monocytic Leukemia		9891	35031
Chronic Myeloid Leukemia		9863, 9875-9876, 9945-9946	35022
Other Myeloid/Monocytic Leukemia		9860, 9930	35023
Other Leukemia			
Other Acute Leukemia		9801, 9805-9809, 9931	35041
Aleukemic, Subleukemic and NOS		9733, 9742, 9800, 9831, 9870, 9948, 9963-9964	35043
	C420, C421, C424	9827	
Mesothelioma		9050-9055	36010
Kaposi Sarcoma		9140	36020
Miscellaneous			
		9740-9741, 9750-9769, 9950, 9960-9962, 9970-9971, 9975, 9980, 9982-9987, 9989, 9991-9992	37000
	C760-C768, C809	excluding 9050-9055, 9140,	
	C420-C424	9590-9992	
	C770-C779		
Invalid	Site or histology code not within valid range or site code not found in this table		99999

^a This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^b Subject to change based on evolving ICD-O-3 coding rules.

Table A.6

International Classification of Childhood Cancer (ICCC)^a Recode ICD-O-3/WHO 2008^{bc}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)
I. Leukemias, myeloproliferative diseases, and myelodysplastic diseases		
a. Lymphoid leukemias	C000-C809 C420-C421, C424	9820, 9826, 9831-9836, 9940, 9948 9811-9818, 9823, 9827, 9837
b. Acute myeloid leukemias	C000-C809	9840, 9861, 9865-9867, 9869-9874, 9891, 9895-9898, 9910-9911, 9920, 9931
c. Chronic myeloproliferative diseases	C000-C809	9863, 9875-9876, 9950, 9960-9964
d. Myelodysplastic syndrome and other myeloproliferative diseases	C000-C809	9945-9946, 9975, 9980, 9982-9987, 9989, 9991-9992
e. Unspecified and other specified leukemias	C000-C809	9800-9801, 9805-9809, 9860, 9930, 9965-9967, 9971
II. Lymphomas and reticuloendothelial neoplasms		
a. Hodgkin lymphomas	C000-C809	9650-9655, 9659, 9661-9665, 9667
b. Non-Hodgkin lymphomas (except Burkitt lymphoma)	C000-C809 C000-C419, C422-C423, C425-C809	9591, 9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9688-9691, 9695, 9698-9699, 9700-9702, 9705, 9708-9709, 9712, 9714, 9716-9719, 9724-9729, 9731-9735, 9737-9738, 9760-9762, 9764-9769, 9970 9811-9818, 9823, 9827, 9837
c. Burkitt lymphoma	C000-C809	9687
d. Miscellaneous lymphoreticular neoplasms	C000-C809	9740-9742, 9750, 9754-9758
e. Unspecified lymphomas	C000-C809	9590, 9596
III. CNS and miscellaneous intracranial and intraspinal neoplasms		
a. Ependymomas and choroid plexus tumor	C000-C809	9383, 9390-9394 ^d
b. Astrocytomas	C723 C000-C809	9380 ^d 9384, 9400-9411, 9420-9424, 9440-9442 ^d
c. Intracranial and intraspinal embryonal tumors	C000-C809 C700-C729	9470-9474, 9480, 9508 ^d 9501-9504 ^d
d. Other gliomas	C700-C722, C724-C729, C751, C753 C000-C809	9380 ^d 9381-9382, 9430, 9444, 9450, 9451, 9460 ^d
e. Other specified intracranial and intraspinal neoplasms	C000-C809	8270-8281, 8300, 9350-9352, 9360-9362, 9412, 9413, 9492-9493, 9505-9507, 9530-9539, 9582 ^d
f. Unspecified intracranial and intraspinal neoplasms	C700-C729, C751-C753	8000-8005 ^d
IV. Neuroblastoma and other peripheral nervous cell tumors		
a. Neuroblastoma and ganglioneuroblastoma	C000-C809	9490, 9500
b. Other peripheral nervous cell tumors	C000-C809 C000-C699, C739-C768, C809 C000-C809	8680-8683, 8690-8693, 8700, 9520-9523 9501-9504 9510-9514
V. Retinoblastoma		
VI. Renal tumors		
a. Nephroblastoma and other nonepithelial renal tumors	C649 C000-C809	8963, 9364 8959, 8960, 8964-8967
b. Renal carcinomas	C649 C000-C809	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8143, 8155, 8190-8201, 8210-8211, 8221-8231, 8240-8241, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8401, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8576 8311, 8312, 8316-8319, 8361
c. Unspecified malignant renal tumors	C649	8000-8005
VII. Hepatic tumors		
a. Hepatoblastoma	C000-C809	8970
b. Hepatic carcinomas	C220, C221 C000-C809	8010-8041, 8050-8075, 8082, 8120-8122, 8140, 8141, 8143, 8155, 8190-8201, 8210-8211, 8230, 8231, 8240, 8241, 8244-8246, 8260-8264, 8310, 8320, 8323, 8401, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8576 8160-8180
c. Unspecified malignant hepatic tumors	C220, C221	8000-8005

^a International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.

^d Tumors with nonmalignant behavior are included for all morphology codes on the line. CNS: central nervous system.

Table A.6 - continued

International Classification of Childhood Cancer (ICCC)^a Recode ICD-O-3/WHO 2008^{bc}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)
VIII. Malignant bone tumors		
a. Osteosarcomas	C400-C419, C760-C768, C809	9180-9187, 9191-9195, 9200
b. Chondrosarcomas	C400-C419, C760-C768, C809	9210, 9220, 9240
	C000-C809	9221, 9230, 9241-9243
c. Ewing tumor and related sarcomas of bone	C400-C419, C760-C768, C809	9260
	C400-C419	9363-9365
d. Other specified malignant bone tumors	C400-C419	8810-8811, 8823, 8830
	C000-C809	8812, 9250, 9261-9262, 9270-9275, 9280-9282, 9290, 9300-9302, 9310-9312, 9320-9322, 9330, 9340-9342, 9370-9372
e. Unspecified malignant bone tumors	C400-C419	8000-8005, 8800, 8801, 8803-8805
IX. Soft tissue and other extraosseous sarcomas		
a. Rhabdomyosarcomas	C000-C809	8900-8905, 8910, 8912, 8920, 8991
b. Fibrosarcomas, peripheral nerve sheath tumors, and other fibrous neoplasms	C000-C399, C440-C768, C809	8810-8811, 8813-8815, 8821, 8823, 8834-8835
	C000-C809	8820, 8822, 8824-8827, 9150, 9160, 9491, 9540-9571, 9580
c. Kaposi sarcoma	C000-C809	9140
d. Other specified soft tissue sarcomas	C000-C809	8587, 8710-8713, 8806, 8831-8833, 8836, 8840-8842, 8850-8858, 8860-8862, 8870, 8880-8881, 8890-8898, 8921, 8982, 8990, 9040-9044, 9120-9125, 9130-9133, 9135, 9136, 9141, 9142, 9161, 9170-9175, 9231, 9251, 9252, 9373, 9581
	C000-C399, C440-C768, C809	8830
	C000-C639, C659-C699, C739-C768, C809	8963
	C490-C499	9180, 9210, 9220, 9240
	C000-C399, C470-C759	9260
	C000-C399, C470-C639, C659-C699, C739-C768, C809	9364
	C000-C399, C470-C639, C659-C768, C809	9365
e. Unspecified soft tissue sarcomas	C000-C399, C440-C768, C809	8800-8805
X. Germ cell tumors, trophoblastic tumors, and neoplasms of gonads		
a. Intracranial and intraspinal germ cell tumors	C700-C729, C751-C753	9060-9065, 9070-9072, 9080-9085, 9100, 9101 ^d
b. Malignant extracranial and extragonadal germ cell tumors	C000-C559, C570-C619, C630-C699, C739-C750, C754-C768, C809	9060-9065, 9070-9072, 9080-9085, 9100-9105
c. Malignant gonadal germ cell tumors	C569, C620-C629	9060-9065, 9070-9073, 9080-9085, 9090, 9091, 9100, 9101
d. Gonadal carcinomas	C569, C620-C629	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8143, 8190-8201, 8210-8211, 8221-8241, 8244-8246, 8260-8263, 8290, 8310, 8313, 8320, 8323, 8380-8384, 8430, 8440, 8480-8490, 8504, 8510, 8550, 8560-8573, 9000, 9014, 9015
	C000-C809	8441-8444, 8450-8451, 8460-8473
e. Other and unspecified malignant gonadal tumors	C569, C620-C629	8000-8005
	C000-C809	8590-8671

^a International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005: Vol 103, No. 7, pg 1457-1467.

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.

^d Tumors with nonmalignant behavior are included for all morphology codes on the line. CNS: central nervous system.

Table A.6 - continued

International Classification of Childhood Cancer (ICCC)^a Recode ICD-O-3/WHO 2008^{bc}

Site Group	ICD-0-3 Site	ICD-0-3 Histology (Type)
XI. Other malignant epithelial neoplasms and malignant melanomas		
a. Adrenocortical carcinomas	C000-C809	8370-8375
b. Thyroid carcinomas	C739	8010-8041, 8050-8075, 8082, 8120-8122, 8130-8141, 8190, 8200-8201, 8211, 8230, 8231, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8430, 8440, 8480, 8481, 8510, 8560-8573
	C000-C809	8330-8337, 8340-8347, 8350
c. Nasopharyngeal carcinomas	C110-C119	8010-8041, 8050-8075, 8082-8083, 8120-8122, 8130-8141, 8190, 8200, 8201, 8211, 8230-8231, 8244-8246, 8260-8263, 8290, 8310, 8320, 8323, 8430, 8440, 8480-8481, 8500-8576
d. Malignant melanomas	C000-C809	8720-8780, 8790
e. Skin carcinomas	C440-C449	8010-8041, 8050-8075, 8078, 8082, 8090-8110, 8140, 8143, 8147, 8190, 8200, 8240, 8246-8247, 8260, 8310, 8320, 8323, 8390-8420, 8430, 8480, 8542, 8560, 8570-8573, 8940, 8941
f. Other and unspecified carcinomas	C000-C069, C079-C109, C129-C189, C199, C209-C218, C239-C349, C379-C399, C480-C488, C500-C549, C559, C570-C619, C630-C639, C659-C699, C700-C729, C750-C768, C809	8010-8084, 8120-8157, 8190-8264, 8290, 8310, 8313-8315, 8320-8325, 8360, 8380-8384, 8430-8440, 8452-8454, 8480-8586, 8588-8589, 8940-8941, 8983, 9000, 9010-9016, 9020, 9030
XII. Other and unspecified malignant neoplasms		
a. Other specified malignant tumors	C000-C809	8930-8936, 8950, 8951, 8971-8981, 9050-9055, 9110
	C000-C399, C470-C759	9363
b. Other unspecified malignant tumors	C000-C218, C239-C399, C420-C559, C570-C619, C630-C639, C659-C699, C739-C750, C754-C809	8000-8005

^a International Classification of Childhood Cancer is based on ICD-O-3. Steliarova-Foucher E, Stiller C, Lacour B, Kaatsch P. International Classification of Childhood Cancer, Third Edition. Cancer. April 1, 2005; Vol 103, No. 7, pg 1457-1467.

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.

^d Tumors with nonmalignant behavior are included for all morphology codes on the line. CNS: central nervous system.

Table A.7

Adapted Classification Scheme for Tumors of Adolescents and Young Adults^a ICD-O-3/WHO 2008 Definition^{bc}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)
1. Leukemias		
1.1 Acute lymphoid leukemia	C000-C809 C420-C421, C424	9826, 9835-9836 9811-9818, 9837
1.2 Acute myeloid leukemia	C000-C809	9840, 9861, 9865-9867, 9869, 9871-9874, 9891, 9895-9898, 9910-9911, 9920
1.3 Chronic myeloid leukemia	C000-C809	9863, 9875-9876, 9945-9946
1.4 Other and unspecified leukemia	C000-C809 C420-C421, C424	9742, 9800-9801, 9805-9809, 9820, 9831-9834, 9860, 9870, 9930-9931, 9940, 9948, 9963-9964 9823, 9827
2. Lymphomas		
2.1 Non-Hodgkin lymphoma	C000-C809 C000-C419, C422-C423, C425-C809	9590-9591, 9596-9597, 9670-9671, 9673, 9675, 9678-9680, 9684, 9687-9691, 9695, 9698-9702, 9705, 9708-9709, 9712, 9714, 9716-9719, 9725-9729, 9735, 9737-9738 9811-9818, 9823, 9827, 9837
2.2 Hodgkin lymphoma	C000-C809	9650-9655, 9659, 9661-9665, 9667
3. CNS and Other Intracranial and Intraspinial Neoplasms		
3.1 Astrocytoma		
3.1.1 Specified low-grade astrocytic tumors	C000-C809 C723	9410-9411, 9420-9421, 9424 9380
3.1.2 Glioblastoma and anaplastic astrocytoma	C000-C809	9401, 9440-9442
3.1.3 Astrocytoma, NOS	C000-C809	9400
3.2 Other glioma	C000-C722, C724-C809 C000-C809	9380 9381-9384, 9423, 9430, 9450-9451, 9460 9391-9394
3.3 Ependymoma	C000-C809	9391-9394
3.4 Medulloblastoma and other PNET		
3.4.1 Medulloblastoma	C716	9470-9474
3.4.2 Supratentorial PNET	C000-C715, C717-C809	9470-9474
3.5 Other specified intracranial intraspinal neoplasms	C000-C699, C730-C750, C754-C809 C700-C729, C751-C753 C700 C753 C711 C713 C719 C714, C717 C709	9350-9351, 9360-9362, 9390, 9480, 9530-9535, 9537-9539, 9541, 9550, 9562, 9570 9161, 9361-9362, 9390, 9530-9531, 9535, 9538, 9540, 9560, 9571 9532, 9534, 9537, 9539 9360 9480, 9539 9480, 9533 9350 9480 9539
3.6 Unspecified intracranial and intraspinal neoplasms	C700-C729, C751-C753	8000-8005
4. Osseous & Chondromatous Neoplasms		
4.1 Osteosarcoma	C000-C809	9180-9187, 9192-9194
4.2 Chondrosarcoma	C000-C809	9220-9221, 9230-9231, 9240, 9242-9243
4.3 Ewing tumor	C000-C809	9260, 9364-9365
4.4 Other specified and unspecified bone tumors	C000-C809 C400-C419	8812, 9250, 9261, 9370-9372 8000-8005, 8800-8803, 8805-8806, 9200
5. Soft Tissue Sarcomas		
5.1 Fibromatous neoplasms	C000-C809	8810-8811, 8813-8815, 8820-8824, 8830, 8832-8833, 8835-8836, 9252
5.2 Rhabdomyosarcoma	C000-C809	8900-8904, 8910, 8912, 8920-8921, 8991
5.3 Other specified soft tissue sarcoma		
5.3.1 Specified soft tissue sarcoma		
5.3.1.1 Specified (excluding Kaposi sarcoma)	C000-C809 C000-C699, C730-C750, C754-C809	8804, 8825, 8840-8897, 8982-8983, 8990, 9040-9044, 9120-9139, 9141-9150, 9170, 9251, 9561, 9580-9581 9540, 9560, 9571
5.3.1.2 Kaposi sarcoma	C000-C809	9140
5.3.2 Unspecified soft tissue sarcoma	C000-C399, C420-C809	8800-8803, 8805-8806

^a Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.
CNS: central nervous system.

Table A.7 - continued

Adapted Classification Scheme for Tumors of Adolescents and Young Adults^a ICD-O-3/WHO 2008 Definition^{bc}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)
6. Germ Cell and Trophoblastic Neoplasms		
6.1 Germ cell and trophoblastic neoplasms of gonads	C569, C620-C629 9091, 9100-9102,	9060-9065, 9070-9073, 9080-9085, 9090-9105
6.2 Germ cell and trophoblastic neoplasms of nongonadal sites		
6.2.1 Intracranial sites	C700-C729, C751, C753	9060-9065, 9070-9073, 9080-9085, 9090-9091, 9100-9102, 9105
6.2.2 Other nongonadal sites	C000-C568, C570- C619, C630-C699, C730-C750, C754- C809	9060-9065, 9070-9073, 9080-9085, 9090-9091, 9100-9102, 9104-9105
7. Melanoma and Skin Carcinomas		
7.1 Melanoma	C000-C809 8761, 8770-8774,	8720-8723, 8726, 8728, 8730, 8740-8746, 8780
7.2 Skin carcinomas	C440-C449	8010-8589
8. Carcinomas		
8.1 Thyroid carcinoma	C739	8010-8589
8.2 Other carcinoma of head and neck		
8.2.1 Nasopharyngeal carcinoma	C110-C119	8010-8589
8.2.2 Other sites in lip, oral cavity and pharynx	C000-C109, C120- C148	8010-8589
8.2.3 Nasal cavity, middle ear, sinuses, larynx, other ill-defined head/neck	C300-C329, C760	8010-8589
8.3 Carcinoma of trachea, bronchus and lung	C330-C349	8010-8589
8.4 Carcinoma of breast	C500-C509	8010-8589
8.5 Carcinoma of genitourinary tract		
8.5.1 Carcinoma of kidney	C649	8010-8589
8.5.2 Carcinoma of bladder	C670-C679	8010-8589
8.5.3 Carcinoma of gonads	8590-8593 C569, C620-C629	8010-8589
8.5.4 Carcinoma of cervix and uterus	C530-C559	8010-8589
8.5.5 Carcinoma of other and ill-defined sites, genitourinary tract	C510-C529, C570- C579, C600-C619, C630-C639, C659, C669, C680-C689	8010-8589
8.6 Carcinoma of gastrointestinal tract		
8.6.1 Carcinoma of colon and rectum	C180-C218	8010-8589
8.6.2 Carcinoma of stomach	C160-C169	8010-8589
8.6.3 Carcinoma of liver and intrahepatic bile ducts	C220-C221	8010-8589
8.6.4 Carcinoma of pancreas	C250-C259	8010-8589
8.6.5 Carcinoma of other and ill-defined sites, gastrointestinal tract	C150-C159, C170- C179, C230-C249, C260-C269	8010-8589
8.7 Carcinoma of other and ill-defined sites, NOS		
8.7.1 Adrenocortical carcinoma	C740-C749	8010-8589
8.7.2 Carcinoma of other and ill-defined sites, NOS	C149, C219, C222- C229, C270-C299, C350-C439, C450- C499, C560-C568, C580-C599, C640- C648, C650-C658, C660-C668, C690- C738, C750-C759, C761-C809 C809	8442, 9010,

^a Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.

Table A.7 - continued

Adapted Classification Scheme for Tumors of Adolescents and Young Adults^a ICD-O-3/WHO 2008 Definition^{bc}

Site Group	ICD-O-3 Site	ICD-O-3 Histology (Type)
9. Miscellaneous specified neoplasms, NOS		
9.1 Other pediatric and embryonal tumors, NOS		
9.1.1 Wilms tumor	C000-C809	8959-8960
9.1.2 Neuroblastoma	C000-C809	9490,9500
9.1.3 Other pediatric and embryonal tumors, NOS	C000-C809	8963-8964, 8970-8973, 8981, 9363, 9501-9523
9.2 Other specified and embryonal tumors, NOS		
9.2.1 Paraganglioma and glomus tumors	C000-C809	8680-8711
9.2.2 Other specified gonadal tumors	C569	8670, 9013-9015, 9054
	C000-C809	8600-8650,9000
9.2.3 Myeloma, mast cell, miscellaneous lymphoreticular neoplasms, NOS	C000-C809	9724, 9731-9734, 9740-9741, 9743-9764, 9766, 9769, 9960, 9965-9967, 9970-9971
9.2.4 Other specified neoplasms, NOS ^d	C000-C809	8930-8951, 8980, 9020, 9050-9053, 9110, 9160, 9270-9330, 9950, 9961-9962, 9980, 9982, 9989, 9991-9992
	C000-C696, C730-C750, C754-C809	9161
10. Unspecified Malignant Neoplasms	C000-C399, C420-C699, C730-C750, C754-C809	8000-8005

^a Adapted from: RD Barr, EJ Holowaty, JM Birch. Classification Scheme for tumors diagnosed in adolescents and young adults. Cancer. 106:7; 1425-1430. (Restricted to malignant tumors and updated based on ICD-O-3 definitions).

^b This table was updated for Hematopoietic codes based on WHO Classification of Tumours of Haematopoietic and Lymphoid Tissues (2008).

^c Subject to change based on evolving ICD-O-3 coding rules.

^d Myeloproliferative disorders and myelodysplastic syndromes were first reported effective January 1, 2001 with the implementation of ICD-O 3.

Table A.8

SEER Cause of Death Recode 1969+ (4/16/2012) Definition

Cancer Causes of Death	ICD-9 (1979-1998) #	ICD-10 (1999+) #
All Malignant Cancers	140-208, 238.6	C00-C97
Oral Cavity and Pharynx		
Lip	140	C00
Tongue	141	C01-C02
Salivary Gland	142	C07-C08
Floor of Mouth	144	C04
Gum and Other Mouth	143, 145	C03, C05-C06
Nasopharynx	147	C11
Tonsil	146.0-146.2	C09
Oropharynx	146.3-146.9	C10
Hypopharynx	148	C12-C13
Other Oral Cavity and Pharynx	149	C14
Digestive System		
Esophagus	150	C15
Stomach	151	C16
Small Intestine	152	C17
Colon and Rectum		
Colon excluding Rectum	153, 159.0	C18, C26.0
Rectum and Rectosigmoid Junction	154.0-154.1	C19-C20
Anus, Anal Canal and Anorectum	154.2-154.3, 154.8	C21
Liver and Intrahepatic Bile Duct		
Liver	155.0, 155.2	C22.0, C22.2-C22.4, C22.7, C22.9
Intrahepatic Bile Duct	155.1	C22.1
Gallbladder	156.0	C23
Other Biliary	156.1-156.2, 156.8-156.9	C24
Pancreas	157	C25
Retroperitoneum	158.0	C48.0
Peritoneum, Omentum and Mesentery	158.8-158.9	C45.1 ⁺ , C48.1-C48.2
Other Digestive Organs	159.8-159.9	C26.8-C26.9, C48.8
Respiratory System		
Nose, Nasal Cavity and Middle Ear	160	C30-C31
Larynx	161	C32
Lung and Bronchus	162.2-162.5, 162.8-162.9	C34
Pleura	163	C38.4, C45.0 ⁺
Trachea, Mediastinum and Other Respiratory Organs	162.0, 164.2-164.3, 164.8-164.9, 165	C33, C38.1-C38.3, C38.8, C39
Bones and Joints	170	C40-C41
Soft Tissue including Heart §	164.1, 171	C47, C49, C38.0, C45.2 ⁺
Skin excluding Basal and Squamous		
Melanoma of the Skin	172	C43
Other Non-Epithelial Skin	173	C44, C46 ⁺
Breast	174-175	C50
Female Genital System		
Cervix Uteri	180	C53
Corpus and Uterus, NOS		
Corpus Uteri	182	C54
Uterus, NOS	179	C55
Ovary	183.0	C56
Vagina	184.0	C52
Vulva	184.1-184.4	C51
Other Female Genital Organs	181, 183.2-183.5, 183.8-183.9, 184.8-184.9	C57-C58
Male Genital System		
Prostate	185	C61
Testis	186	C62
Penis	187.1-187.4	C60
Other Male Genital Organs	187.5-187.9	C63
Urinary System		
Urinary Bladder	188	C67
Kidney and Renal Pelvis	189.0-189.1	C64-C65
Ureter	189.2	C66
Other Urinary Organs	189.3-189.4, 189.8-189.9	C68
Eye and Orbit	190	C69
Brain and Other Nervous System	191, 192	C70, C71, C72
Endocrine System		
Thyroid	193	C73
Other Endocrine including Thymus [§]	164.0, 194	C37, C74-C75
Lymphoma		
Hodgkin Lymphoma	201	C81
Non-Hodgkin Lymphoma	200, 202.0-202.2, 202.8-202.9	C82-C85, C96.3

Table A.8 - continued

SEER Cause of Death Recode 1969+ (4/16/2012) Definition

Cancer Causes of Death	ICD-9 (1979-1998) #	ICD-10 (1999+) #
Myeloma	203.0, 238.6	C90.0, C90.2
Leukemia		
Lymphocytic Leukemia		
Acute Lymphocytic Leukemia	204.0	C91.0
Chronic Lymphocytic Leukemia	204.1	C91.1
Other Lymphocytic Leukemia	202.4, 204.2, 204.8-204.9	C91.2-C91.4, C91.7, C91.9
Myeloid and Monocytic Leukemia		
Acute Myeloid Leukemia	205.0, 207.0, 207.2	C92.0, C92.4-C92.5, C94.0, C94.2
Acute Monocytic Leukemia	206.0	C93.0
Chronic Myeloid Leukemia	205.1	C92.1
Other Myeloid/Monocytic Leukemia	205.2-205.3, 205.8-205.9, 206.1-206.2, 206.8-206.9	C92.2-C92.3, C92.7, C92.9, C93.1-C93.2, C93.7, C93.9
Other Leukemia		
Other Acute Leukemia	208.0	C94.4, C94.5, C95.0
Aleukemic, Subleukemic and NOS	203.1, 207.1, 207.8, 208.1-208.2, 208.8-208.9	C90.1, C91.5, C94.1, C94.3, C94.7, C95.1, C95.2, C95.7, C95.9
Mesothelioma (ICD-10 only) +	N/A	C45+
Kaposi Sarcoma (ICD-10 only) +	N/A	C46+
Miscellaneous	159.1, 195-199, 202.3, 202.5-202.6, 203.8	C26.1, C45.7+, C45.9+, C76-C80, C88, C96.0-C96.2, C96.7, C96.9, C97

Non-Cancer Causes of Death	ICD-8 (1968-1978) #	ICD-9 (1979-1998) #	ICD-10 (1999+) #
In situ, benign or unknown behavior neoplasm	208-239	210-237, 238.0-238.5, 238.7-238.9, 239	D00-D48
Tuberculosis	010-018	010-018	A15-A19
Syphilis	090-097	090-097	A50-A53
Human Immunodeficiency Virus (1987+)	N/A	042-044	B20-B24
Septicemia	038	038	A40-A41
Other Infectious and Parasitic Diseases	001-009, 020-037, 039-043, 045-065, 067-076, 078-089, 098-130.1, 130.3-136	001-009, 020-037, 039-041, 045-088, 098-139	A00-A08, A20-A33, A35-A39, A42-A49, A54-B19 B25-B99
Diabetes Mellitus	250	250	E10-E14
Alzheimers (ICD-9 and 10 only)	N/A	331.0	G30
Diseases of Heart	390-398, 402, 404, 410-429	390-398, 402, 404, 410-429	I00-I09, I11, I13, I20-I51
Hypertension without Heart Disease	400-401, 403	401, 403	I10, I12
Cerebrovascular Diseases	430-438	430-438	I60-I69
Atherosclerosis	440	440	I70
Aortic Aneurysm and Dissection	441	441	I71
Other Diseases of Arteries, Arterioles, Capillaries	442-448	442-448	I72-I78
Pneumonia and Influenza	470-474, 480-486	480-487	J09-J18
Chronic Obstructive Pulmonary Disease and Allied Cond	490-493, 519.3	490-496	J40-J47
Stomach and Duodenal Ulcers	531-533	531-533	K25-K28
Chronic Liver Disease and Cirrhosis	571	571	K70, K73-K74
Nephritis, Nephrotic Syndrome and Nephrosis	580-584, 593.0-593.3, 593.5	580-589	N00-N07, N17-N19, N25-N27
Complications of Pregnancy, Childbirth, Puerperium	630-678	630-676	A34, O00-O95, O98-O99
Congenital Anomalies	740-759	740-759	Q00-Q99
Certain Conditions Originating in Perinatal Period	760-779	760-779	P00-P96
Symptoms, Signs and Ill-Defined Conditions	780-796	780-799	R00-R99
Accidents and Adverse Effects	800-949*	800-949*	V01-X59, Y85-Y86
Suicide and Self-Inflicted Injury	950-959*	950-959*	U03, X60-X84, Y87.0
Homicide and Legal Intervention	960-978*	960-978*	U01-U02, X85-Y09, Y35, Y87.1, Y89.0

All ICD codes are tested for validity prior to generating this variable. Those deemed invalid are classified as Unknown/missing/invalid COD. Those deemed valid but not meeting the definition of any above grouping are classified as Other Cause of Death.

+ This variable can be created with or without Mesothelioma (C45) and Kaposi Sarcoma (C46) as separate groupings. The table above documents both possibilities. Note this is only possible with ICD-10.

\$ ICD-8 code 192.5 is coded to Other Endocrine including Thymus for age at death less than 20 years and Soft Tissue including Heart for age at death 20+ years.

* External causes of injury and poisoning.

Table A.9

Annual Populations Averaged Over 2008-2012

By State, Race/Ethnicity and Sex

State	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Total U.S.	309,129,608	152,024,566	157,105,042	245,568,869	121,518,590	124,050,278	42,152,863	20,151,412	22,001,450
Alabama	4,776,174	2,317,317	2,458,856	3,396,380	1,671,642	1,724,738	1,279,803	596,588	683,215
Alaska	710,780	369,536	341,244	507,135	266,809	240,327	32,087	17,396	14,691
Arizona	6,410,450	3,187,428	3,223,023	5,508,419	2,737,837	2,770,581	316,985	164,725	152,261
Arkansas	2,916,402	1,431,798	1,484,604	2,373,812	1,172,643	1,201,169	466,253	221,891	244,361
California	37,313,545	18,552,972	18,760,573	28,337,838	14,209,263	14,128,576	2,715,245	1,340,377	1,374,869
Colorado	5,043,596	2,529,358	2,514,238	4,534,007	2,274,524	2,259,483	246,201	128,938	117,264
Connecticut	3,573,462	1,740,024	1,833,437	2,985,411	1,457,302	1,528,109	415,860	198,508	217,353
Delaware	900,071	435,982	464,088	656,319	320,349	335,970	205,098	96,867	108,231
Dist. of Columbia	606,128	286,640	319,488	257,199	128,386	128,812	320,088	145,614	174,475
Florida	18,886,047	9,234,465	9,651,582	15,040,842	7,386,617	7,654,225	3,198,655	1,541,269	1,657,386
Georgia	9,712,953	4,747,574	4,965,378	6,235,848	3,106,151	3,129,697	3,067,931	1,440,525	1,627,406
Hawaii	1,361,930	682,972	678,958	337,471	181,903	155,568	36,040	21,160	14,880
Idaho	1,567,799	785,290	782,509	1,496,439	749,565	746,874	15,556	8,709	6,847
Illinois	12,821,535	6,290,053	6,531,482	10,129,024	5,013,405	5,115,620	1,962,409	921,120	1,041,289
Indiana	6,485,643	3,191,354	3,294,289	5,693,465	2,808,803	2,884,662	643,816	309,714	334,101
Iowa	3,047,812	1,509,140	1,538,671	2,863,962	1,414,469	1,449,494	107,773	56,784	50,989
Kansas	2,850,927	1,415,291	1,435,636	2,536,376	1,257,300	1,279,076	195,816	99,796	96,020
Kentucky	4,340,250	2,134,558	2,205,692	3,903,870	1,919,305	1,984,565	365,321	180,840	184,481
Louisiana	4,529,991	2,215,919	2,314,073	2,929,490	1,451,387	1,478,103	1,484,559	706,796	777,764
Maine	1,328,762	650,252	678,510	1,282,966	627,294	655,672	20,056	11,075	8,981
Maryland	5,785,531	2,799,732	2,985,799	3,607,632	1,778,371	1,829,261	1,785,781	833,115	952,667
Massachusetts	6,560,286	3,174,657	3,385,629	5,597,508	2,710,770	2,886,738	542,999	261,762	281,237
Michigan	9,896,347	4,855,618	5,040,730	8,057,246	3,976,470	4,080,776	1,483,855	705,711	778,144
Minnesota	5,313,062	2,637,777	2,675,285	4,685,586	2,323,977	2,361,609	314,195	160,155	154,041
Mississippi	2,968,193	1,441,521	1,526,672	1,804,285	892,471	911,814	1,115,943	525,739	590,205

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

Table A.9 - continued

Annual Populations Averaged Over 2008-2012

By State, Race/Ethnicity and Sex

State	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Missouri	5,983,131	2,930,395	3,052,736	5,093,223	2,505,963	2,587,260	733,545	348,994	384,550
Montana	990,804	497,293	493,510	905,446	454,882	450,564	7,562	4,455	3,107
Nebraska	1,827,200	906,970	920,230	1,666,134	826,258	839,876	96,470	49,025	47,446
Nevada	2,702,766	1,364,985	1,337,781	2,153,251	1,098,971	1,054,280	256,997	129,508	127,489
New Hampshire	1,317,663	650,255	667,408	1,260,795	621,450	639,346	20,434	11,251	9,182
New Jersey	8,794,757	4,284,225	4,510,533	6,619,304	3,242,783	3,376,521	1,334,383	629,558	704,826
New Mexico	2,054,781	1,015,610	1,039,171	1,738,106	859,592	878,513	57,922	31,048	26,874
New York	19,399,317	9,393,608	10,005,708	14,090,063	6,894,218	7,195,846	3,527,122	1,636,777	1,890,345
North Carolina	9,543,658	4,650,406	4,893,252	6,990,498	3,444,313	3,546,185	2,153,538	1,010,816	1,142,722
North Dakota	676,619	342,337	334,282	618,228	312,561	305,667	10,904	6,379	4,525
Ohio	11,538,505	5,634,307	5,904,198	9,766,591	4,786,575	4,980,016	1,511,917	722,098	789,818
Oklahoma	3,749,425	1,855,292	1,894,133	2,964,227	1,467,187	1,497,040	319,449	158,911	160,537
Oregon	3,836,459	1,898,626	1,937,833	3,480,529	1,722,864	1,757,665	94,623	50,480	44,142
Pennsylvania	12,699,080	6,190,253	6,508,827	10,758,758	5,258,457	5,500,301	1,508,802	722,527	786,274
Rhode Island	1,052,394	508,598	543,797	921,481	444,636	476,845	84,583	41,898	42,684
South Carolina	4,630,431	2,253,251	2,377,180	3,202,131	1,580,321	1,621,810	1,330,102	625,110	704,992
South Dakota	816,044	408,601	407,443	715,573	357,829	357,744	14,199	8,295	5,904
Tennessee	6,352,678	3,096,667	3,256,010	5,114,621	2,510,280	2,604,341	1,101,653	520,049	581,604
Texas	25,211,537	12,511,592	12,699,945	20,670,742	10,304,124	10,366,618	3,169,622	1,531,672	1,637,950
Utah	2,766,106	1,389,755	1,376,350	2,583,344	1,297,074	1,286,270	42,404	23,643	18,761
Vermont	625,407	308,166	317,240	604,997	298,039	306,959	8,531	4,661	3,870
Virginia	8,015,266	3,935,170	4,080,095	5,832,359	2,890,991	2,941,369	1,641,565	784,978	856,587
Washington	6,737,742	3,359,343	3,378,400	5,684,483	2,840,593	2,843,890	314,420	167,574	146,846
West Virginia	1,850,819	912,250	938,569	1,760,453	864,762	895,692	71,517	38,247	33,270
Wisconsin	5,686,532	2,822,290	2,864,242	5,081,666	2,524,915	2,556,751	394,442	193,781	200,661
Wyoming	562,814	287,090	275,724	533,336	271,942	261,394	7,831	4,506	3,325

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

Table A.9 - continued

Annual Populations Averaged Over 2008-2012

By State, Race/Ethnicity and Sex

State	Asian/Pacific Islander			American Indian/Alaska Native			Hispanic ^a		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Total U.S.	17,182,299	8,232,463	8,949,836	4,225,577	2,122,100	2,103,477	50,536,310	25,671,927	24,864,383
CHSDA counties ^b	-	-	-	2,184,057	1,085,541	1,098,516	-	-	-
Non-CHSDA counties ^b	-	-	-	2,041,520	1,036,559	1,004,962	-	-	-
Alabama	64,743	31,183	33,560	35,249	17,906	17,343	182,549	101,484	81,065
Alaska	51,033	24,430	26,603	120,525	60,902	59,623	40,770	21,047	19,723
Arizona	225,936	107,412	118,524	359,110	177,454	181,656	1,901,098	957,436	943,662
Arkansas	47,344	22,756	24,588	28,993	14,508	14,485	185,843	99,251	86,591
California	5,536,453	2,637,328	2,899,125	724,009	366,005	358,004	14,016,081	7,086,248	6,929,834
Colorado	171,712	79,495	92,217	91,675	46,402	45,273	1,039,295	531,011	508,284
Connecticut	152,241	74,202	78,039	19,950	10,013	9,937	480,862	240,626	240,236
Delaware	32,251	15,539	16,712	6,403	3,227	3,176	73,261	37,966	35,296
Dist. of Columbia	24,815	10,667	14,148	4,026	1,973	2,053	56,455	29,075	27,380
Florida	546,385	254,481	291,904	100,165	52,098	48,066	4,248,050	2,102,181	2,145,869
Georgia	356,238	173,028	183,210	52,936	27,871	25,065	853,257	460,901	392,356
Hawaii	982,167	476,526	505,642	6,251	3,384	2,867	118,992	60,532	58,460
Idaho	26,078	12,062	14,016	29,726	14,954	14,772	175,707	91,494	84,213
Illinois	646,146	312,565	333,581	83,955	42,963	40,992	2,024,947	1,046,706	978,241
Indiana	119,674	58,263	61,411	28,689	14,574	14,115	388,962	204,680	184,282
Iowa	60,606	30,124	30,482	15,471	7,764	7,707	151,718	80,123	71,595
Kansas	78,553	38,068	40,484	40,183	20,127	20,056	299,116	156,142	142,975
Kentucky	58,377	27,788	30,589	12,682	6,625	6,057	131,660	73,336	58,324
Louisiana	79,984	39,671	40,313	35,959	18,066	17,893	192,007	105,273	86,734
Maine	15,307	6,736	8,571	10,433	5,147	5,286	17,392	8,757	8,635
Maryland	356,359	169,936	186,422	35,759	18,310	17,449	472,915	247,802	225,113
Massachusetts	385,032	184,628	200,404	34,748	17,498	17,250	632,429	311,395	321,033
Michigan	270,061	131,488	138,573	85,185	41,948	43,237	438,360	223,229	215,132
Minnesota	235,092	114,553	120,538	78,190	39,092	39,098	250,244	132,066	118,177
Mississippi	30,470	14,533	15,936	17,495	8,778	8,717	81,196	47,311	33,886

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

^a Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^b American Indian/Alaska Native statistics are reported based on the CHSDA (Contract Health Service Delivery Area) counties. All other race/ethnicities are not shown for these areas.

Table A.9 - continued

Annual Populations Averaged Over 2008-2012

By State, Race/Ethnicity and Sex

State	Asian/Pacific Islander			American Indian/Alaska Native			Hispanic ^a		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Missouri	117,397	55,881	61,515	38,967	19,556	19,410	212,641	110,853	101,788
Montana	8,371	3,558	4,812	69,424	34,398	35,027	29,440	14,927	14,513
Nebraska	38,572	18,598	19,974	26,023	13,090	12,933	167,518	88,319	79,199
Nevada	242,801	111,665	131,136	49,718	24,841	24,877	717,061	367,994	349,066
New Hampshire	31,813	15,190	16,623	4,621	2,364	2,257	37,462	18,874	18,588
New Jersey	784,013	382,450	401,563	57,058	29,435	27,623	1,559,616	786,346	773,270
New Mexico	38,202	17,667	20,535	220,551	107,302	113,249	952,267	472,564	479,703
New York	1,571,701	757,678	814,024	210,430	104,936	105,494	3,423,728	1,688,920	1,734,808
North Carolina	244,078	117,750	126,328	155,544	77,528	78,017	796,030	426,020	370,009
North Dakota	8,082	4,029	4,053	39,404	19,368	20,036	14,551	7,776	6,776
Ohio	221,081	106,285	114,796	38,917	19,349	19,568	355,683	183,438	172,245
Oklahoma	79,667	38,191	41,476	386,083	191,003	195,080	331,354	175,839	155,515
Oregon	180,255	84,224	96,031	81,051	41,057	39,994	449,522	235,741	213,781
Pennsylvania	384,699	185,885	198,813	46,822	23,383	23,438	723,561	370,047	353,515
Rhode Island	35,910	16,997	18,913	10,421	5,066	5,354	131,588	65,210	66,378
South Carolina	71,685	34,022	37,663	26,513	13,797	12,715	233,145	129,614	103,531
South Dakota	9,176	4,437	4,739	77,097	38,041	39,056	23,214	12,562	10,653
Tennessee	108,138	51,465	56,672	28,266	14,874	13,393	289,150	157,553	131,597
Texas	1,100,415	537,221	563,194	270,757	138,575	132,182	9,470,889	4,774,403	4,696,485
Utah	94,628	46,032	48,596	45,730	23,006	22,723	357,187	184,740	172,447
Vermont	8,830	3,939	4,891	3,048	1,528	1,520	9,467	4,758	4,708
Virginia	495,487	235,520	259,967	45,854	23,682	22,172	634,179	330,437	303,742
Washington	590,973	276,933	314,040	147,866	74,242	73,624	755,318	394,399	360,918
West Virginia	14,611	6,949	7,662	4,237	2,293	1,945	22,826	12,246	10,580
Wisconsin	142,872	69,820	73,052	67,551	33,774	33,778	335,372	175,793	159,579
Wyoming	5,788	2,618	3,169	15,859	8,023	7,836	50,374	26,482	23,892

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

^a Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Table A.10

Annual Populations Averaged Over 2008-2012

By SEER Registry, Race/Ethnicity and Sex

Area	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
California	37,313,545	18,552,972	18,760,573	28,337,838	14,209,263	14,128,576	2,715,245	1,340,377	1,374,869
Greater Bay Area	6,869,938	3,415,024	3,454,914	4,469,511	2,257,024	2,212,486	498,528	244,153	254,375
San Francisco-Oakland, SMSA	4,348,260	2,144,578	2,203,682	2,745,737	1,381,159	1,364,578	416,035	199,873	216,162
San Jose-Monterey	2,521,678	1,270,446	1,251,232	1,723,774	875,866	847,908	82,493	44,280	38,213
Los Angeles	9,837,096	4,850,383	4,986,713	7,205,031	3,605,035	3,599,995	970,244	457,181	513,063
Greater California	20,606,511	10,287,566	10,318,945	16,663,297	8,347,203	8,316,094	1,246,474	639,043	607,430
Connecticut	3,573,462	1,740,024	1,833,437	2,985,411	1,457,302	1,528,109	415,860	198,508	217,353
Metropolitan Detroit	3,871,266	1,870,804	2,000,461	2,688,017	1,320,299	1,367,718	1,006,762	463,942	542,820
Georgia	9,712,953	4,747,574	4,965,378	6,235,848	3,106,151	3,129,697	3,067,931	1,440,525	1,627,406
Metropolitan Atlanta	3,388,189	1,647,333	1,740,856	1,755,637	882,857	872,780	1,374,933	636,457	738,476
Rural Georgia	126,791	62,631	64,160	73,862	37,164	36,698	51,772	24,884	26,888
Greater Georgia	6,197,972	3,037,610	3,160,362	4,406,350	2,186,130	2,220,219	1,641,226	779,184	862,042
Hawaii	1,361,930	682,972	678,958	337,471	181,903	155,568	36,040	21,160	14,880
Iowa	3,047,812	1,509,140	1,538,671	2,863,962	1,414,469	1,449,494	107,773	56,784	50,989
Kentucky	4,340,250	2,134,558	2,205,692	3,903,870	1,919,305	1,984,565	365,321	180,840	184,481
Louisiana	4,529,991	2,215,919	2,314,073	2,929,490	1,451,387	1,478,103	1,484,559	706,796	777,764
New Jersey	8,794,757	4,284,225	4,510,533	6,619,304	3,242,783	3,376,521	1,334,383	629,558	704,826
New Mexico	2,054,781	1,015,610	1,039,171	1,738,106	859,592	878,513	57,922	31,048	26,874
Seattle-Puget Sound	4,604,132	2,294,439	2,309,693	3,716,879	1,859,388	1,857,491	270,897	143,101	127,796
Utah	2,766,106	1,389,755	1,376,350	2,583,344	1,297,074	1,286,270	42,404	23,643	18,761
9 SEER areas ^a	29,015,937	14,294,656	14,721,281	21,414,563	10,654,043	10,760,520	3,728,626	1,774,516	1,954,110
11 SEER areas ^a	41,374,711	20,415,485	20,959,226	30,343,367	15,134,944	15,208,424	4,781,362	2,275,976	2,505,386
13 SEER areas ^a	42,212,283	20,847,653	21,364,630	30,924,364	15,438,916	15,485,448	4,865,221	2,318,256	2,546,965
18 SEER areas ^a	86,681,764	42,807,530	43,874,234	65,446,674	32,585,724	32,860,950	10,937,184	5,253,677	5,683,507

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

^a The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus Greater California (California excluding SF/SJM/LA), Kentucky, Louisiana, New Jersey and Greater Georgia (Georgia excluding ATL/RG).

Table A.10 - continued

Annual Populations Averaged Over 2008-2012

By SEER Registry, Race/Ethnicity and Sex

Area	Asian/Pacific Islander			Hispanic ^a		
	Both Sexes	Males	Females	Both Sexes	Males	Females
California	5,536,453	2,637,328	2,899,125	14,016,081	7,086,248	6,929,834
Greater Bay Area	1,800,146	861,619	938,526	1,757,520	901,012	856,508
San Francisco-Oakland, SMSA	1,132,852	535,835	597,017	935,179	478,534	456,645
San Jose-Monterey	667,294	325,785	341,509	822,341	422,478	399,863
Los Angeles	1,495,534	703,840	791,694	4,691,146	2,345,704	2,345,442
Greater California	2,240,773	1,071,868	1,168,905	7,567,415	3,839,532	3,727,883
Connecticut	152,241	74,202	78,039	480,862	240,626	240,236
Metropolitan Detroit	155,787	76,702	79,085	156,380	79,267	77,113
Georgia	356,238	173,028	183,210	853,257	460,901	392,356
Metropolitan Atlanta	235,565	116,214	119,351	418,111	224,994	193,117
Rural Georgia	717	347	370	4,454	2,614	1,840
Greater Georgia	119,956	56,467	63,490	430,692	233,293	197,399
Hawaii	982,167	476,526	505,642	118,992	60,532	58,460
Iowa	60,606	30,124	30,482	151,718	80,123	71,595
Kentucky	58,377	27,788	30,589	131,660	73,336	58,324
Louisiana	79,984	39,671	40,313	192,007	105,273	86,734
New Jersey	784,013	382,450	401,563	1,559,616	786,346	773,270
New Mexico	38,202	17,667	20,535	952,267	472,564	479,703
Seattle-Puget Sound	526,276	246,756	279,520	398,938	209,545	189,394
Utah	94,628	46,032	48,596	357,187	184,740	172,447
9 SEER areas ^b	3,378,324	1,620,057	1,758,267	3,969,634	2,030,924	1,938,710
11 SEER areas ^b	5,541,152	2,649,681	2,891,471	9,483,121	4,799,105	4,684,015
13 SEER areas ^b	5,592,902	2,674,458	2,918,444	9,528,345	4,822,767	4,705,578
18 SEER areas ^b	8,876,005	4,252,701	4,623,304	19,409,735	9,860,547	9,549,188

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

^a Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus Greater California (California excluding SF/SJM/LA), Kentucky, Louisiana, New Jersey and Greater Georgia (Georgia excluding ATL/RG).

Table A.10 - continued

Annual Populations Averaged Over 2008-2012

American Indian/Alaska Native By SEER Registry, CHSDA County Status and Sex

Area	American Indian/Alaska Native Total U.S.			American Indian/Alaska Native CHSDA			American Indian/Alaska Native Non-CHSDA		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
Alaska	120,525	60,902	59,623	120,525	60,902	59,623	0	0	0
California	724,009	366,005	358,004	300,408	151,004	149,404	423,601	215,001	208,599
Greater Bay Area	101,754	52,227	49,527	0	0	0	101,754	52,227	49,527
San Francisco- Oakland, SMSA	53,637	27,712	25,925	0	0	0	53,637	27,712	25,925
San Jose-Monterey	48,117	24,515	23,602	0	0	0	48,117	24,515	23,602
Los Angeles	166,288	84,327	81,961	0	0	0	166,288	84,327	81,961
Greater California	455,967	229,451	226,516	300,408	151,004	149,404	155,559	78,447	77,111
Connecticut	19,950	10,013	9,937	19,950	10,013	9,937	0	0	0
Metropolitan Detroit	20,700	9,861	10,838	0	0	0	20,700	9,861	10,838
Georgia	52,936	27,871	25,065	0	0	0	52,936	27,871	25,065
Metropolitan Atlanta	22,055	11,805	10,249	0	0	0	22,055	11,805	10,249
Rural Georgia	441	237	204	0	0	0	441	237	204
Greater Georgia	30,440	15,828	14,612	0	0	0	30,440	15,828	14,612
Hawaii	6,251	3,384	2,867	0	0	0	6,251	3,384	2,867
Iowa	15,471	7,764	7,707	5,291	2,596	2,695	10,179	5,168	5,011
Kentucky	12,682	6,625	6,057	0	0	0	12,682	6,625	6,057
Louisiana	35,959	18,066	17,893	4,102	2,037	2,065	31,857	16,029	15,828
New Jersey	57,058	29,435	27,623	0	0	0	57,058	29,435	27,623
New Mexico	220,551	107,302	113,249	208,265	101,080	107,184	12,287	6,222	6,065
Seattle-Puget Sound	90,080	45,193	44,887	90,080	45,193	44,887	0	0	0
Utah	45,730	23,006	22,723	23,243	11,512	11,731	22,487	11,495	10,993
9 SEER areas ^a	494,425	246,041	248,383	346,829	170,394	176,434	147,596	75,647	71,949
11 SEER areas ^a	708,829	354,884	353,946	346,829	170,394	176,434	362,001	184,489	177,512
13 SEER areas ^a	829,795	416,022	413,773	467,353	231,296	236,057	362,442	184,726	177,716
18 SEER areas ^a	1,421,900	715,427	706,473	771,864	384,337	387,527	650,037	331,091	318,946

Source: NCI estimates based on Census Bureau population data. Male and female populations may not sum to both sexes due to rounding.

^a The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus Greater California (California excluding SF/SJM/LA), Kentucky, Louisiana, New Jersey and Greater Georgia (Georgia excluding ATL/RG).

Table A.11

Standard Populations, By Age

Age	2000 United States Standard Population (Census P25-1130)
All Ages	274,633,642
Age <1	3,794,901
Ages 1-4	15,191,619
Ages 5-9	19,919,840
Ages 10-14	20,056,779
Ages 15-19	19,819,518
Ages 20-24	18,257,225
Ages 25-29	17,722,067
Ages 30-34	19,511,370
Ages 35-39	22,179,956
Ages 40-44	22,479,229
Ages 45-49	19,805,793
Ages 50-54	17,224,359
Ages 55-59	13,307,234
Ages 60-64	10,654,272
Ages 65-69	9,409,940
Ages 70-74	8,725,574
Ages 75-79	7,414,559
Ages 80-84	4,900,234
Ages 85+	4,259,173

Age	IARC World Standard Million Population
All Ages	1,000,000
Age <1	24,000
Ages 1-4	96,000
Ages 5-9	100,000
Ages 10-14	90,000
Ages 15-19	90,000
Ages 20-24	80,000
Ages 25-29	80,000
Ages 30-34	60,000
Ages 35-39	60,000
Ages 40-44	60,000
Ages 45-49	60,000
Ages 50-54	50,000
Ages 55-59	40,000
Ages 60-64	40,000
Ages 65-69	30,000
Ages 70-74	20,000
Ages 75-79	10,000
Ages 80-84	5,000
Ages 85+	5,000

Source: U.S. Bureau of the Census, Census of Population 2000.

Muir C, Waterhouse J, Mack T, Powell J, Whelan S. Cancer Incidence In Five Continents, Volume V, pg. 792.

Table A.12
All Cancer Sites (Invasive)

SEER Follow-Up Rates^a for Cases Diagnosed 1975-2011
By Registry, Sex, and Age

	Males				Females			
	All Ages	0-19	20-64	65+	All Ages	0-19	20-64	65+
<u>Followed Into 2011</u>								
Registry								
Standard 9 registries	98.95	94.74	98.34	99.52	97.91	93.40	96.73	99.16
San Francisco-Oakland	98.69	93.98	97.98	99.38	97.73	93.64	96.39	99.11
Connecticut	98.25	90.31	97.01	99.27	96.84	86.97	94.56	98.99
Metropolitan Detroit	99.10	95.72	98.66	99.52	97.78	95.24	96.52	99.04
Hawaii	99.06	99.20	98.40	99.53	98.20	95.89	97.22	99.41
Iowa	99.85	99.34	99.69	99.96	99.33	98.74	98.97	99.60
New Mexico	98.15	89.87	97.37	98.91	95.29	89.34	93.99	96.81
Seattle-Puget Sound	99.22	93.13	98.83	99.66	98.64	90.93	97.93	99.57
Utah	98.90	95.25	98.14	99.63	97.89	93.45	96.66	99.58
Metropolitan Atlanta	99.07	97.91	98.66	99.60	98.67	97.71	97.99	99.66
<u>Followed Into 2012</u>								
Registry								
Standard 9 registries	98.64	93.07	97.86	99.37	97.32	91.55	95.82	98.91
San Francisco-Oakland	98.34	92.57	97.54	99.11	97.24	91.82	95.75	98.78
Connecticut	97.91	88.87	96.43	99.14	96.26	84.68	93.53	98.82
Metropolitan Detroit	98.90	94.21	98.39	99.41	97.41	93.57	96.02	98.83
Hawaii	98.57	95.50	97.68	99.28	97.38	91.28	96.03	99.14
Iowa	99.79	99.04	99.57	99.94	98.97	98.10	98.53	99.30
New Mexico	97.64	88.05	96.65	98.57	94.23	87.38	92.68	96.04
Seattle-Puget Sound	99.01	90.65	98.53	99.58	98.30	88.73	97.44	99.43
Utah	98.54	93.48	97.64	99.46	97.27	91.73	95.72	99.39
Metropolitan Atlanta	98.28	95.97	97.40	99.41	97.03	96.31	95.34	99.44

^a Represents the percentage of first primaries diagnosed 1975-2011 and followed into the specified year.