

Table 1.4
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

All Races									
Site	Incidence ^a (2012-2016)			US Mortality ^b (2012-2016)			Survival ^c (%) (2009-2015)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	442.0	481.0	417.1	161.0	193.1	137.7	67.1	66.3	68.0
Oral Cavity & Pharynx:	11.3	17.0	6.4	2.5	3.9	1.3	65.3	64.6	67.1
Lip	0.6	1.0	0.3	0.0	0.0	0.0	89.7	90.0	89.0
Tongue	3.5	5.2	1.9	0.6	1.0	0.4	66.4	66.8	65.3
Salivary gland	1.3	1.7	1.0	0.3	0.4	0.2	71.4	64.2	81.4
Floor of mouth	0.5	0.7	0.3	0.0	0.0	0.0	51.7	49.4	56.8
Gum & other oral cavity	1.5	1.9	1.3	0.4	0.5	0.3	59.0	55.4	63.3
Nasopharynx	0.6	0.9	0.4	0.2	0.3	0.1	61.3	59.5	65.6
Tonsil	2.0	3.4	0.7	0.2	0.4	0.1	74.3	74.9	71.2
Oropharynx	0.5	0.8	0.2	0.3	0.4	0.1	47.1	48.5	41.2
Hypopharynx	0.6	1.0	0.2	0.1	0.2	0.0	34.6	34.3	36.2
Other oral cavity & pharynx	0.3	0.4	0.1	0.4	0.7	0.2	46.6	49.2	36.9
Digestive System:	81.0	98.7	66.4	41.1	52.7	31.6	43.5	41.1	46.4
Esophagus	4.3	7.3	1.8	4.0	7.1	1.5	19.9	19.4	21.5
Stomach	7.4	10.0	5.3	3.1	4.2	2.3	31.5	28.7	35.7
Small intestine	2.4	2.7	2.1	0.4	0.5	0.3	68.0	67.9	68.2
Colon & Rectum:	38.6	44.2	33.9	14.2	16.9	11.9	64.4	64.0	64.9
Colon	27.1	29.9	24.8	-	-	-	63.4	63.2	63.5
Rectum	11.5	14.3	9.1	-	-	-	66.7	65.4	68.5
Anus, anal canal & anorectum	1.9	1.6	2.2	0.3	0.2	0.3	68.3	61.9	72.0
Liver & intrahepatic bile duct	8.8	13.6	4.7	6.5	9.6	3.9	18.4	18.0	19.5
Gallbladder	1.2	0.9	1.5	0.6	0.4	0.7	18.5	19.3	18.2
Other biliary	1.9	2.3	1.5	0.4	0.5	0.4	17.9	19.0	16.6
Pancreas	12.9	14.6	11.5	11.0	12.6	9.6	9.3	9.4	9.2
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	54.8	53.1	56.3
Peritoneum, omentum & mesentery	0.5	0.1	0.8	0.3	0.1	0.4	32.4	34.4	32.3
Other digestive system	0.7	0.8	0.6	0.3	0.4	0.3	7.9	6.8	9.0
Respiratory System:	58.7	69.4	50.6	43.1	53.8	34.9	22.3	20.7	24.3
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.1	0.2	0.1	57.9	58.5	57.1
Larynx	3.0	5.2	1.1	1.0	1.8	0.4	60.3	60.9	57.8
Lung & bronchus	54.9	63.0	48.9	41.9	51.6	34.4	19.4	16.1	23.0
Pleura ^d	0.0	0.0	0.0	0.1	0.1	0.0	25.8	20.3	32.9
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.0	53.8	53.1	55.7
Bones & joints	1.0	1.1	0.8	0.4	0.5	0.3	66.2	64.0	69.1
Soft tissue (including heart)	3.5	4.2	2.9	1.3	1.5	1.2	64.9	64.2	65.8
Skin (excl. basal & squamous):	24.3	31.6	19.0	3.5	5.4	2.0	91.6	89.7	94.1
Melanoma of the skin	22.2	28.8	17.5	2.5	3.7	1.5	92.2	90.4	94.6
Other non-epithelial skin	2.0	2.8	1.5	1.0	1.7	0.5	84.3	82.2	87.3
Breast	68.4	1.2	127.5	11.4	0.3	20.6	89.8	83.6	89.9
Breast (<i>in situ</i>)	17.5	0.1	33.2	-	-	-	100.0	100.0	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c SEER 18 areas. Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^d Mesotheliomas of the Pleura are included in the separate group Mesothelioma for incidence but are included in the Pleura grouping for mortality.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table 1.4 - continued
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

All Races									
Site	Incidence ^a (2012-2016)			US Mortality ^b (2012-2016)			Survival ^c (%) (2009-2015)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	27.1	-	51.0	8.3	-	15.1	69.5	-	69.5
Cervix uteri	3.8	-	7.3	1.2	-	2.3	65.8	-	65.8
Corpus uteri	14.2	-	26.7	1.2	-	2.1	82.6	-	82.6
Uterus, NOS	0.5	-	0.8	1.5	-	2.6	28.8	-	28.8
Ovary ^d	6.1	-	11.4	3.9	-	7.0	47.6	-	47.6
Vagina	0.4	-	0.7	0.1	-	0.2	46.7	-	46.7
Vulva	1.4	-	2.5	0.3	-	0.5	71.1	-	71.1
Other female genital system	0.8	-	1.5	0.2	-	0.3	52.0	-	52.0
Male Genital System:	53.4	116.5	-	8.1	19.7	-	97.7	97.7	-
Prostate	50.0	109.5	-	7.8	19.2	-	98.0	98.0	-
Testis	2.9	5.9	-	0.1	0.3	-	95.2	95.2	-
Penis	0.4	0.9	-	0.1	0.2	-	66.7	66.7	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	82.6	82.6	-
Urinary System:	37.1	58.7	20.2	8.4	13.4	4.7	75.5	76.1	74.0
Urinary bladder	20.1	35.2	8.7	4.4	7.6	2.1	77.1	78.3	73.2
Kidney & renal pelvis	16.1	22.1	10.9	3.8	5.5	2.3	74.8	74.2	75.9
Ureter	0.5	0.8	0.4	0.1	0.2	0.1	46.5	47.7	44.7
Other urinary system	0.4	0.6	0.2	0.1	0.2	0.1	48.3	53.0	39.5
Eye & Orbit	0.9	1.0	0.8	0.1	0.1	0.1	83.3	83.3	83.4
Brain & Nervous System: ^e	6.4	7.5	5.4	4.4	5.4	3.6	32.9	31.6	34.6
Brain	6.0	7.1	5.0	-	-	-	29.7	28.9	30.8
Cranial nerves & other nervous system	0.4	0.4	0.4	-	-	-	79.9	76.9	83.0
Endocrine System:	16.6	8.9	24.0	0.8	0.8	0.8	96.6	92.5	97.9
Thyroid	15.8	8.0	23.3	0.5	0.5	0.5	98.2	95.7	98.9
Other endocrine & thymus	0.8	0.9	0.7	0.3	0.3	0.3	65.4	65.3	65.4
Lymphoma:	22.3	26.9	18.6	5.9	7.6	4.6	74.0	72.6	75.5
Hodgkin lymphoma	2.7	3.0	2.3	0.3	0.4	0.2	86.6	85.6	87.8
Non-Hodgkin lymphoma	19.6	23.9	16.2	5.6	7.3	4.4	72.0	70.7	73.7
Myeloma	6.9	8.7	5.6	3.3	4.2	2.7	52.2	52.1	52.4
Leukemia:	14.1	18.1	10.9	6.5	8.8	4.9	62.7	63.6	61.5
Lymphocytic:	7.1	9.4	5.2	1.8	2.5	1.2	80.6	80.9	80.1
Acute lymphocytic	1.7	1.9	1.5	0.4	0.5	0.4	68.6	68.2	69.2
Chronic lymphocytic	4.9	6.8	3.5	1.2	1.8	0.8	85.1	85.0	85.3
Other lymphocytic	0.4	0.6	0.2	0.1	0.2	0.1	82.0	85.7	70.4
Myeloid & Monocytic:	6.5	8.1	5.3	3.3	4.4	2.6	41.8	41.6	42.0
Acute myeloid	4.3	5.2	3.5	2.8	3.6	2.2	28.3	27.5	29.3
Chronic myeloid	1.9	2.4	1.4	0.3	0.4	0.2	69.2	68.2	70.6
Acute monocytic	0.2	0.2	0.2	0.0	0.0	0.0	22.9	19.7	26.7
Other myeloid & monocytic	0.1	0.2	0.1	0.2	0.3	0.2	36.3	37.6	34.6
Other leukemia:	0.5	0.6	0.4	1.4	1.9	1.1	33.5	33.7	33.3
Other acute leukemia	0.2	0.3	0.2	0.5	0.6	0.4	24.8	25.3	24.2
Aleukemic, subleukemic & NOS	0.3	0.3	0.2	1.0	1.3	0.7	40.2	40.4	39.7
Kaposi Sarcoma ^f	0.5	1.0	0.1	-	-	-	74.4	73.9	78.7
Mesothelioma ^f	0.9	1.6	0.4	-	-	-	10.3	8.0	16.9
Ill-defined & unspecified	7.6	8.8	6.7	11.8	14.8	9.4	18.5	21.7	15.2

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c SEER 18 areas. Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

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

^e Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

^f Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table 1.5
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Whites									
Site	Incidence ^a (2012-2016)			US Mortality ^b (2012-2016)			Survival ^c (%) (2009-2015)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	451.7	486.0	430.9	161.5	193.0	138.3	67.5	66.5	68.6
Oral Cavity & Pharynx:	11.9	17.9	6.6	2.5	3.8	1.3	66.7	66.4	67.7
Lip	0.7	1.2	0.4	0.0	0.0	0.0	89.6	89.9	88.7
Tongue	3.8	5.8	2.0	0.7	1.0	0.4	68.1	68.6	66.5
Salivary gland	1.3	1.8	1.0	0.3	0.4	0.2	69.0	61.5	80.1
Floor of mouth	0.5	0.7	0.3	0.0	0.0	0.0	53.1	50.8	57.7
Gum & other oral cavity	1.6	1.9	1.3	0.4	0.5	0.3	58.9	55.5	63.0
Nasopharynx	0.4	0.6	0.2	0.1	0.2	0.1	58.3	57.0	61.5
Tonsil	2.2	3.8	0.7	0.3	0.4	0.1	75.6	76.0	73.0
Oropharynx	0.5	0.8	0.2	0.3	0.4	0.1	50.6	52.0	44.7
Hypopharynx	0.6	1.0	0.2	0.1	0.2	0.0	37.7	37.3	39.2
Other oral cavity & pharynx	0.3	0.5	0.1	0.4	0.7	0.2	49.8	52.9	37.9
Digestive System:	79.1	95.9	64.8	40.1	51.4	30.6	43.7	41.4	46.7
Esophagus	4.6	7.9	1.8	4.2	7.5	1.5	20.7	20.4	21.9
Stomach	6.6	8.9	4.6	2.7	3.7	2.0	30.1	27.4	34.7
Small intestine	2.3	2.7	2.0	0.4	0.5	0.3	68.6	68.0	69.2
Colon & Rectum:	38.1	43.4	33.6	13.8	16.5	11.7	64.9	64.5	65.3
Colon	26.8	29.4	24.6	-	-	-	64.3	64.1	64.4
Rectum	11.3	14.0	8.9	-	-	-	66.4	65.4	67.7
Anus, anal canal & anorectum	2.0	1.6	2.5	0.3	0.2	0.3	69.3	63.0	72.7
Liver & intrahepatic bile duct	8.0	12.2	4.3	6.1	8.9	3.7	17.7	17.5	18.3
Gallbladder	1.1	0.8	1.4	0.6	0.4	0.7	18.2	19.2	17.8
Other biliary	1.8	2.3	1.5	0.4	0.5	0.4	17.8	19.6	15.6
Pancreas	13.0	14.8	11.4	10.9	12.6	9.4	9.2	9.5	9.0
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	54.2	53.4	55.0
Peritoneum, omentum & mesentery	0.5	0.1	0.9	0.3	0.1	0.4	31.6	30.3	31.7
Other digestive system	0.7	0.8	0.6	0.3	0.4	0.3	7.8	7.0	8.8
Respiratory System:	60.7	70.0	53.6	43.9	53.8	36.2	22.5	20.9	24.3
Nose, nasal cavity & middle ear	0.7	0.9	0.5	0.1	0.2	0.1	59.1	60.5	56.9
Larynx	3.0	5.2	1.2	1.0	1.7	0.4	61.5	62.1	59.2
Lung & bronchus	56.7	63.5	51.8	42.7	51.7	35.6	19.5	16.2	23.0
Pleura ^d	0.0	0.0	0.0	0.1	0.1	0.0	23.4	23.8	22.0
Trachea & other respiratory organs	0.2	0.3	0.1	0.1	0.1	0.0	53.7	52.2	57.9
Bones & joints	1.0	1.2	0.9	0.5	0.6	0.4	66.0	63.7	69.2
Soft tissue (including heart)	3.5	4.3	2.9	1.3	1.6	1.1	65.5	64.9	66.3
Skin (excl. basal & squamous):	28.8	37.0	22.8	4.0	6.2	2.3	90.9	88.9	93.6
Melanoma of the skin	26.6	33.9	21.3	2.9	4.3	1.8	91.6	89.6	94.2
Other non-epithelial skin	2.1	3.0	1.5	1.1	1.9	0.5	81.6	79.4	84.8
Breast	69.2	1.2	130.5	11.1	0.3	20.1	90.8	85.9	90.8
Breast (<i>in situ</i>)	17.2	0.1	33.1	-	-	-	100.0	99.9	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	27.4	-	52.2	8.1	-	15.0	70.8	-	70.8
Cervix uteri	3.6	-	7.2	1.1	-	2.2	67.2	-	67.2
Corpus uteri	14.4	-	27.4	1.1	-	2.0	84.8	-	84.8
Uterus, NOS	0.4	-	0.7	1.3	-	2.4	31.6	-	31.6
Ovary ^d	6.3	-	11.9	4.0	-	7.3	47.6	-	47.6
Vagina	0.4	-	0.7	0.1	-	0.2	46.5	-	46.5
Vulva	1.5	-	2.8	0.3	-	0.6	70.7	-	70.7
Other female genital system	0.8	-	1.6	0.2	-	0.3	50.6	-	50.6
Male Genital System:	51.1	110.0	-	7.6	18.5	-	97.8	97.8	-
Prostate	47.0	101.9	-	7.4	18.0	-	98.1	98.1	-
Testis	3.5	7.0	-	0.1	0.3	-	95.3	95.3	-
Penis	0.4	0.9	-	0.1	0.2	-	66.5	66.5	-
Other male genital system	0.1	0.3	-	0.0	0.0	-	83.4	83.4	-
Urinary System:	39.8	62.8	21.4	8.7	14.1	4.8	75.8	76.3	74.5
Urinary bladder	22.2	38.5	9.5	4.6	8.0	2.2	77.5	78.5	74.3
Kidney & renal pelvis	16.6	22.8	11.3	3.9	5.7	2.4	74.8	74.0	76.0
Ureter	0.6	0.8	0.4	0.1	0.2	0.1	47.6	48.6	46.3
Other urinary system	0.4	0.6	0.2	0.1	0.2	0.1	48.2	52.4	39.6
Eye & Orbit	1.0	1.2	0.9	0.1	0.1	0.1	82.5	82.2	82.8
Brain & Nervous System: ^e	7.0	8.3	6.0	4.8	5.8	3.9	31.7	30.4	33.4
Brain	6.6	7.8	5.6	-	-	-	28.6	27.8	29.6
Cranial nerves & other nervous system	0.4	0.5	0.4	-	-	-	80.7	77.1	84.3
Endocrine System:	17.3	9.4	25.2	0.8	0.8	0.7	96.9	93.1	98.2
Thyroid	16.5	8.6	24.5	0.5	0.5	0.5	98.4	96.1	99.0
Other endocrine & thymus	0.7	0.8	0.7	0.3	0.3	0.3	65.0	64.9	65.1
Lymphoma:	23.4	28.1	19.5	6.2	8.0	4.8	74.3	73.0	75.8
Hodgkin lymphoma	2.8	3.1	2.5	0.3	0.4	0.3	86.8	85.9	87.9
Non-Hodgkin lymphoma	20.6	25.0	17.0	5.9	7.6	4.5	72.4	71.1	74.0
Myeloma	6.3	8.1	4.9	3.1	4.0	2.4	51.3	51.3	51.3
Leukemia:	14.9	19.1	11.5	6.8	9.1	5.1	63.0	63.7	62.1
Lymphocytic:	7.7	10.1	5.6	1.9	2.6	1.3	80.7	80.8	80.5
Acute lymphocytic	1.9	2.1	1.6	0.5	0.6	0.4	68.5	67.7	69.6
Chronic lymphocytic	5.4	7.3	3.8	1.3	1.9	0.8	85.0	84.7	85.4
Other lymphocytic	0.5	0.7	0.2	0.1	0.2	0.1	83.2	86.4	72.5
Myeloid & Monocytic:	6.7	8.4	5.4	3.5	4.5	2.7	40.9	40.6	41.4
Acute myeloid	4.4	5.4	3.6	2.9	3.7	2.2	27.9	27.0	29.0
Chronic myeloid	1.9	2.5	1.5	0.3	0.4	0.2	68.1	67.1	69.5
Acute monocytic	0.2	0.2	0.2	0.0	0.0	0.0	23.5	20.2	27.5
Other myeloid & monocytic	0.2	0.2	0.1	0.2	0.4	0.2	33.6	33.9	33.0
Other leukemia:	0.5	0.6	0.4	1.5	2.0	1.1	32.5	31.8	33.1
Other acute leukemia	0.2	0.3	0.2	0.5	0.6	0.4	24.9	25.2	24.3
Aleukemic, subleukemic & NOS	0.3	0.3	0.2	1.0	1.3	0.7	38.7	37.4	39.8
Kaposi Sarcoma ^f	0.4	0.8	0.1	-	-	-	77.5	76.2	83.4
Mesothelioma ^f	1.0	1.8	0.5	-	-	-	9.7	7.8	15.7
Ill-defined & unspecified	7.8	9.1	6.8	11.9	15.0	9.5	19.3	23.1	15.3

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c SEER 18 areas. Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

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

^e Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

^f Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table 1.6
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Blacks									
Site	Incidence ^a (2012-2016)			US Mortality ^b (2012-2016)			Survival ^c (%) (2009-2015)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Sites	442.9	520.8	391.3	185.6	233.5	156.0	61.8	63.6	59.7
Oral Cavity & Pharynx:	8.6	13.4	5.0	2.7	4.7	1.3	48.4	46.7	52.0
Lip	0.1	0.1	-	-	-	-	69.9	66.6	-
Tongue	2.0	3.2	1.1	0.5	0.8	0.3	44.3	45.3	42.0
Salivary gland	1.1	1.1	1.1	0.2	0.3	0.1	76.4	71.3	81.0
Floor of mouth	0.4	0.7	0.2	0.0	0.0	-	38.9	39.0	38.2
Gum & other oral cavity	1.3	1.6	1.0	0.3	0.5	0.2	52.9	48.9	57.1
Nasopharynx	0.7	1.0	0.4	0.2	0.4	0.1	52.5	53.7	49.9
Tonsil	1.5	2.8	0.6	0.2	0.4	0.1	57.9	59.0	53.2
Oropharynx	0.5	1.0	0.2	0.4	0.6	0.2	28.9	30.0	25.3
Hypopharynx	0.8	1.5	0.3	0.2	0.3	0.0	19.8	20.2	17.3
Other oral cavity & pharynx	0.2	0.4	0.1	0.6	1.2	0.2	30.4	29.4	32.6
Digestive System:	95.7	118.8	79.0	52.3	68.5	40.7	39.9	36.2	44.0
Esophagus	3.9	6.4	2.1	3.3	5.6	1.7	13.0	10.8	17.4
Stomach	10.3	14.1	7.7	5.5	8.2	3.8	32.0	26.5	38.9
Small intestine	3.7	4.2	3.3	0.6	0.7	0.5	66.3	66.8	65.6
Colon & Rectum:	44.6	52.4	39.1	18.9	23.8	15.5	58.4	56.2	60.4
Colon	32.8	37.5	29.5	-	-	-	56.5	55.6	57.3
Rectum	11.8	14.9	9.5	-	-	-	63.3	57.9	69.6
Anus, anal canal & anorectum	2.1	2.3	1.9	0.3	0.3	0.2	61.2	56.0	66.3
Liver & intrahepatic bile duct	10.8	17.8	5.4	8.4	13.2	4.7	15.1	14.1	18.2
Gallbladder	1.8	1.5	2.2	0.9	0.7	1.0	17.4	14.6	18.4
Other biliary	1.7	2.0	1.5	0.4	0.4	0.4	14.7	11.3	17.5
Pancreas	15.2	16.7	14.0	13.3	14.8	12.2	9.0	7.7	10.1
Retroperitoneum	0.4	0.4	0.4	0.1	0.1	0.1	58.2	57.4	58.6
Peritoneum, omentum & mesentery	0.4	0.1	0.6	0.2	0.1	0.3	32.9	44.9	31.6
Other digestive system	0.9	1.0	0.8	0.4	0.6	0.3	6.4	5.4	7.5
Respiratory System:	61.1	82.2	46.7	46.2	65.6	33.1	20.1	18.4	22.4
Nose, nasal cavity & middle ear	0.6	0.9	0.5	0.1	0.2	0.1	50.9	46.0	57.1
Larynx	4.0	7.6	1.5	1.6	3.1	0.5	51.1	51.7	48.7
Lung & bronchus	56.2	73.5	44.6	44.3	62.1	32.4	17.1	13.9	21.0
Pleura ^d	-	-	-	0.0	0.1	0.0	-	-	-
Trachea & other respiratory organs	0.2	0.2	0.1	0.1	0.1	0.1	46.7	47.4	44.3
Bones & joints	0.8	0.8	0.7	0.4	0.6	0.4	65.2	64.7	65.8
Soft tissue (including heart)	3.4	3.7	3.2	1.5	1.5	1.5	60.1	58.9	61.0
Skin (excl. basal & squamous):	2.1	2.3	2.0	0.8	1.2	0.5	81.7	76.4	86.1
Melanoma of the skin	1.0	1.1	0.9	0.4	0.4	0.3	66.8	58.5	73.0
Other non-epithelial skin	1.1	1.2	1.0	0.4	0.7	0.2	93.3	88.7	96.5
Breast	70.9	1.8	124.0	16.4	0.5	28.1	81.4	72.5	81.5
Breast (<i>in situ</i>)	18.8	0.2	33.3	-	-	-	100.0	82.0	100.0

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c SEER 18 areas. Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^d Mesotheliomas of the Pleura are included in the separate group Mesothelioma for incidence but are included in the Pleura grouping for mortality.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Table 1.6 - continued
Age-Adjusted SEER Incidence and U.S. Death Rates and 5-Year Relative Survival (Percent)
By Primary Cancer Site, Sex and Time Period

Blacks									
Site	Incidence ^a (2012-2016)			US Mortality ^b (2012-2016)			Survival ^c (%) (2009-2015)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Female Genital System:	28.1	-	49.4	11.1	-	19.0	56.1	-	56.1
Cervix uteri	4.8	-	8.7	2.0	-	3.5	55.4	-	55.4
Corpus uteri	14.7	-	25.7	2.0	-	3.4	64.6	-	64.6
Uterus, NOS	1.0	-	1.7	3.0	-	5.1	21.8	-	21.8
Ovary ^d	5.3	-	9.2	3.6	-	6.1	38.8	-	38.8
Vagina	0.6	-	1.0	0.2	-	0.3	45.5	-	45.5
Vulva	1.0	-	1.8	0.2	-	0.3	71.4	-	71.4
Other female genital system	0.7	-	1.2	0.2	-	0.3	56.4	-	56.4
Male Genital System:	76.2	179.6	-	14.5	39.3	-	95.5	95.5	-
Prostate	74.9	176.7	-	14.3	38.9	-	95.7	95.7	-
Testis	0.8	1.6	-	0.1	0.1	-	91.8	91.8	-
Penis	0.4	1.0	-	0.1	0.2	-	58.6	58.6	-
Other male genital system	0.1	0.2	-	0.0	0.1	-	63.3	63.3	-
Urinary System:	29.8	44.9	19.2	7.2	11.0	4.8	70.7	71.8	68.8
Urinary bladder	11.8	19.7	6.6	3.5	5.4	2.4	64.3	68.5	56.0
Kidney & renal pelvis	17.4	24.3	12.1	3.6	5.5	2.3	75.1	74.5	76.0
Ureter	0.2	0.3	0.2	0.0	0.0	0.0	31.8	23.5	35.2
Other urinary system	0.5	0.6	0.4	0.1	0.2	0.1	38.5	47.3	28.1
Eye & Orbit	0.3	0.3	0.2	0.0	0.0	0.0	91.0	88.7	91.0
Brain & Nervous System: ^e	3.9	4.7	3.3	2.6	3.2	2.1	38.7	37.1	40.4
Brain	3.5	4.3	3.0	-	-	-	34.9	33.7	36.1
Cranial nerves & other nervous system	0.4	0.4	0.3	-	-	-	77.6	77.8	77.2
Endocrine System:	10.5	5.0	15.3	0.9	0.8	0.9	94.0	86.9	95.9
Thyroid	9.6	4.0	14.3	0.5	0.4	0.6	97.2	93.3	97.8
Other endocrine & thymus	0.9	1.0	0.9	0.4	0.4	0.3	66.3	65.7	66.7
Lymphoma:	17.4	20.8	14.8	4.4	5.5	3.5	69.9	67.1	73.2
Hodgkin lymphoma	2.7	3.1	2.3	0.3	0.4	0.2	84.1	81.2	87.5
Non-Hodgkin lymphoma	14.7	17.7	12.4	4.1	5.2	3.3	66.5	63.7	69.8
Myeloma	13.7	16.3	11.9	6.2	7.4	5.4	53.9	53.4	54.4
Leukemia:	10.9	13.9	8.9	5.5	7.2	4.4	56.8	59.1	54.2
Lymphocytic:	4.6	6.3	3.4	1.4	2.0	1.0	72.1	74.5	68.8
Acute lymphocytic	1.0	1.1	0.9	0.3	0.4	0.3	63.7	64.9	62.1
Chronic lymphocytic	3.4	4.9	2.4	1.0	1.5	0.7	75.8	78.2	72.5
Other lymphocytic	0.2	0.3	0.1	0.1	0.1	0.1	65.1	70.7	47.9
Myeloid & Monocytic:	5.7	6.9	5.0	2.7	3.4	2.2	43.9	43.6	44.1
Acute myeloid	3.7	4.4	3.3	2.2	2.7	1.9	27.9	26.7	29.0
Chronic myeloid	1.8	2.2	1.5	0.3	0.4	0.2	71.0	69.7	72.4
Acute monocytic	0.1	0.2	0.1	0.0	0.0	-	25.5	26.3	24.4
Other myeloid & monocytic	0.1	0.2	0.1	0.2	0.2	0.1	42.0	44.8	37.2
Other leukemia:	0.6	0.7	0.5	1.4	1.8	1.1	38.9	41.7	34.3
Other acute leukemia	0.2	0.3	0.2	0.4	0.5	0.3	21.3	18.5	26.3
Aleukemic, subleukemic & NOS	0.4	0.4	0.3	1.0	1.4	0.8	46.3	52.8	37.9
Kaposi Sarcoma ^f	1.1	2.1	0.2	-	-	-	64.3	65.9	33.1
Mesothelioma ^f	0.4	0.8	0.2	-	-	-	16.8	10.5	27.9
Ill-defined & unspecified	8.2	9.3	7.4	12.8	16.5	10.3	13.2	12.1	14.1

Note: Incidence and death rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^a SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^c SEER 18 areas. Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

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

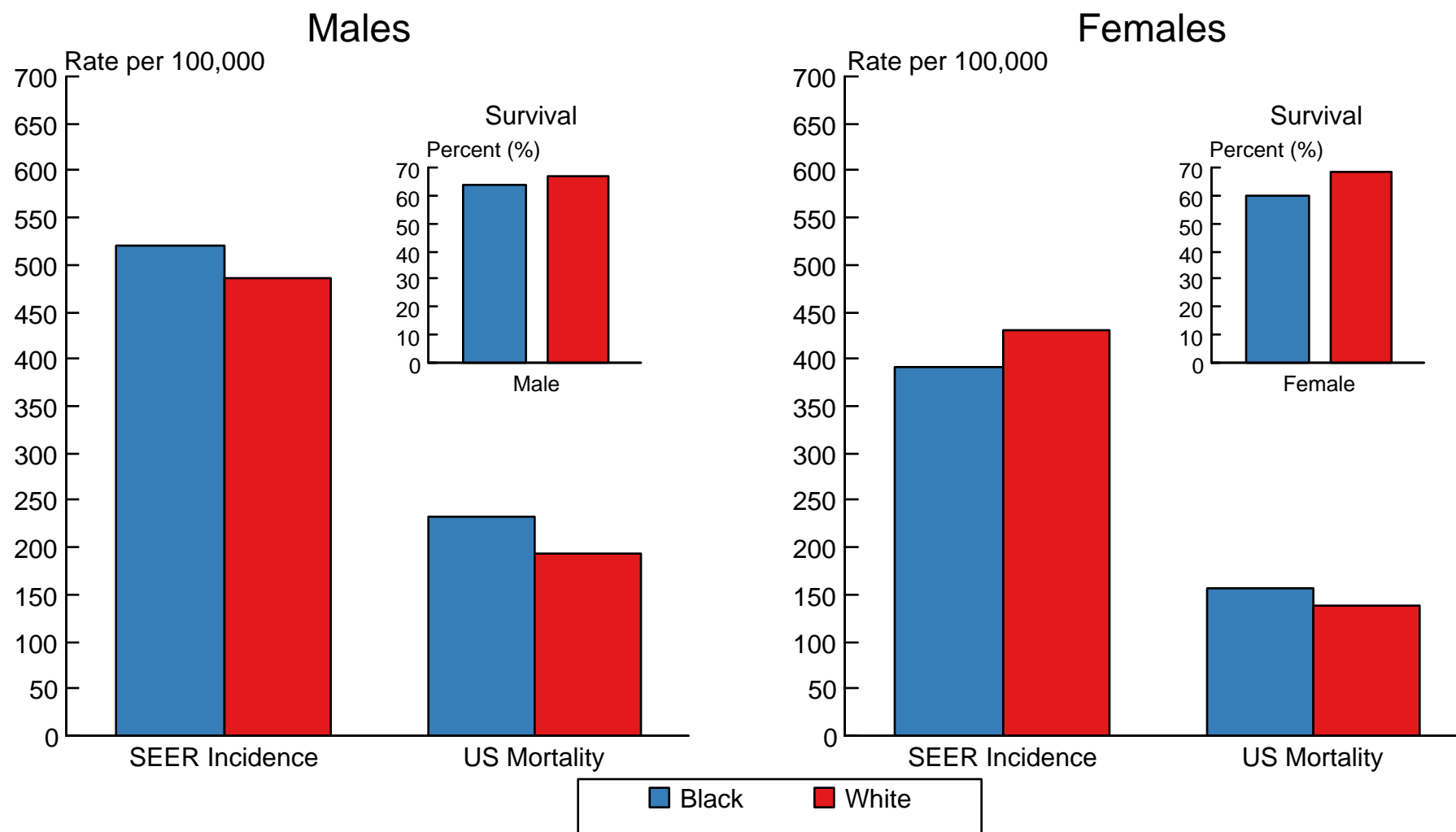
^e Due to coding changes, Brain & Nervous System mortality are no longer shown separately.

^f Rate not shown for mortality. Category did not exist in mortality coding until 1999.

- Statistic could not be calculated due to less than 16 cases in the time interval.

Figure 1.9

SEER Incidence^a and US Death Rates,^b 2012-2016 5-Year Relative Survival,^c 2009-2015 All Cancer Combined, by Race and Sex



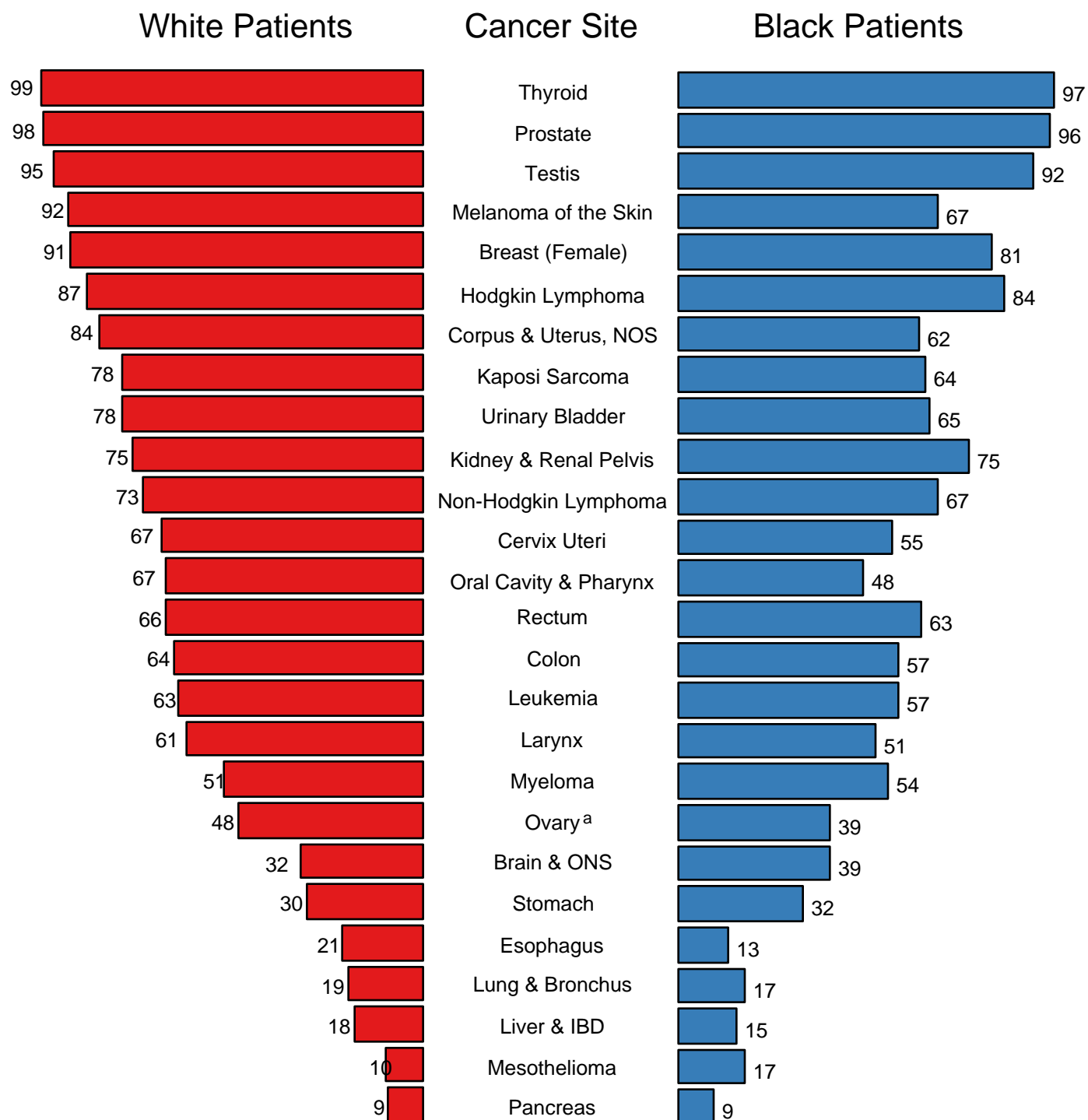
^a Incidence rates are from the SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts) and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

^b Death rates are from the US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

^c Survival rates are from the 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).

Figure 1.11

5-Year Relative Survival (%) SEER Program, 2009-2015 Both Sexes, by Race and Cancer Site



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

Table 2.8
All Cancer Sites (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	39	-	-	27	-	-
1970-1973 ^a	-	-	-	43	-	-	31	-	-
1975-1977 ^b	48.9	41.7	55.9	49.8	42.7	56.5	39.1	32.7	46.2
1978-1980 ^b	49.0	43.1	55.0	50.0	44.3	55.6	39.0	33.3	45.6
1981-1983 ^b	50.2	45.2	55.1	51.3	46.6	56.0	38.8	34.2	44.4
1984-1986 ^b	52.4	47.2	57.6	53.6	48.6	58.6	40.2	35.5	45.5
1987-1989 ^b	55.3	51.2	59.6	56.7	52.8	60.6	43.0	38.9	47.7
1990-1992 ^b	59.9	59.1	60.9	61.4	60.8	62.1	47.9	47.7	48.2
1993-1995 ^b	61.3	60.9	61.8	62.4	62.1	62.8	52.9	54.6	50.7
1996-1998 ^b	63.3	63.0	63.7	64.4	64.1	64.7	55.4	58.1	52.2
1999-2001 ^b	66.0	66.3	65.7	67.2	67.6	66.8	58.1	61.3	54.4
2002-2004 ^b	67.1	67.7	66.5	68.4	69.0	67.7	59.7	63.4	55.5
2005-2008 ^b	68.7	69.4	68.0	69.8	70.4	69.2	62.0	65.5	58.1
2009-2015 ^b	69.3 ^e	68.7 ^e	70.0 ^e	70.3 ^e	69.6 ^e	71.0 ^e	63.6 ^e	65.7 ^e	61.4 ^e
5-Year Period Survival (Percent) ^{cd}									
2015	67.1	65.7	68.4	67.4	65.7	69.1	61.8	63.0	60.3
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	82.9	78.8	85.5	84.3	80.3	86.8	73.3	68.1	76.2
Ages 45-54	74.7	69.2	79.0	75.6	69.7	80.2	67.3	66.3	68.1
Ages 55-64	70.0	68.7	71.6	70.8	69.1	72.8	63.4	65.0	61.1
Ages 65-74	67.2	68.9	64.9	67.5	68.9	65.7	61.9	66.3	56.0
Ages 75+	50.7	52.9	48.6	51.3	52.9	49.7	43.2	47.8	39.6
Ages <65	73.9	70.4	77.3	74.8	71.0	78.4	66.3	65.8	66.9
Ages 65+	59.7	62.3	56.7	60.0	62.2	57.6	54.8	60.5	48.6

- ^a Based on End Results data from a series of hospital registries and one population-based registry.
- ^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.
- ^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.
- ^d Based on follow-up of patients into 2016. Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival). The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).
- ^e The standard error is between 5 and 10 percentage points.
- ^f The standard error is greater than 10 percentage points.
- ^g -
- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 3.8
Cancer of the Brain and Other Nervous System (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	18	16	21	19	17	21
1970-1973 ^a	-	-	-	20	18	22	19	19	19
1975-1977 ^b	22.5	20.7	24.8	21.9	20.2	24.1	25.4	19.6	34.7 ^g
1978-1980 ^b	23.6	22.4	25.1	23.0	22.0	24.4	28.2	28.7	27.5
1981-1983 ^b	24.1	23.0	25.5	23.4	22.4	24.6	30.8	31.7	29.2 ^g
1984-1986 ^b	26.9	25.6	28.5	26.2	24.8	27.8	30.9	32.8	28.5
1987-1989 ^b	29.0	27.4	31.1	28.3	26.3	30.8	31.9	34.0	29.3
1990-1992 ^b	30.2	30.5	29.7	29.2	29.4	28.9	39.3	40.2	38.1
1993-1995 ^b	32.2	33.0	31.3	30.8	31.4	30.2	41.9	46.1	37.3
1996-1998 ^b	31.3	30.7	32.1	30.6	30.2	31.0	35.9	33.6	38.3
1999-2001 ^b	33.9	30.9	37.8	33.1	30.4	36.6	38.6	33.4	45.6
2002-2004 ^b	35.1	34.2	36.1	34.2	33.9	34.5	39.4	33.3	45.8
2005-2008 ^b	35.5	34.3	37.0	33.9	33.0	35.1	43.6	39.7	47.3
2009-2015 ^b	34.0 ^f	32.6 ^f	35.7 ^f	32.6 ^f	31.1 ^f	34.4 ^f	39.8 ^f	39.3 ^f	40.2
5-Year Period Survival (Percent) ^{cd}									
2015	32.5	31.1	34.5	31.1	29.5	33.2	40.2	39.7	40.6
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	34,898	19,445	15,453	29,776	16,710	13,066	2,532	1,328	1,204
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	77	78	77	78	78	77	77	78	75
Regional	15	15	15	15	15	15	15	13	16
Distant	2	3	2	2	2	2	3	3	4
Unstaged/Unknown	5	4	6	5	4	5	5	5	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	69.2	67.1	71.9	69.8	67.7	72.6	65.6	63.5	67.8
Ages 45-54	32.5	29.5	36.8	32.3	29.1	36.9	28.9	26.3	32.4
Ages 55-64	15.8	14.2	18.1	15.2	13.8	17.2	17.5	12.8	23.3
Ages 65-74	9.0	7.7	10.7	8.9	7.2	11.0	8.6	10.9	7.2
Ages 75+	4.3	4.2	4.4	3.9	4.1	3.8	8.5	-	9.0
Ages <65	44.9	42.2	48.7	44.0	41.2	47.9	47.0	43.4	51.1
Ages 65+	6.9	6.2	7.6	6.6	5.9	7.4	8.6	9.5	7.8
Stage ^e :									
All Stages	32.9	31.6	34.6	31.7	30.4	33.4	38.7	37.1	40.4
Localized	35.7	34.3	37.6	34.5	33.0	36.5	40.7	39.7	41.7
Regional	20.2	19.6	21.0	19.2	18.7	19.8	26.2	20.5	31.3
Distant	32.4	29.3	36.8	30.9	27.9	35.3	42.2 ^g	39.8 ^g	45.5 ^g
Unstaged/Unknown	28.2	27.4	28.9	25.5	24.6	26.3	42.3	39.0 ^g	45.2 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 4.13
Cancer of the Female Breast (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	63	-	-	46	-	-
1970-1973 ^a	-	-	-	68	-	-	51	-	-
1975-1977 ^b	74.8	76.5	74.3	75.6	77.8	74.9	62.2	62.4	62.0
1978-1980 ^b	74.4	75.5	74.1	75.1	76.1	74.9	63.4	67.0	61.5
1981-1983 ^b	76.1	77.4	75.7	77.1	78.5	76.7	63.4	65.1	62.6
1984-1986 ^b	79.0	77.8	79.3	80.0	79.5	80.2	65.1	64.0	65.9
1987-1989 ^b	84.0	81.4	85.0	85.1	82.7	85.9	71.1	69.6	71.9
1990-1992 ^b	85.2	83.4	85.9	85.5	85.1	87.0	71.5	70.1	72.4
1993-1995 ^b	86.4	84.3	87.1	87.6	86.2	88.1	72.8	70.5	74.2
1996-1998 ^b	88.2	86.6	88.8	89.4	88.3	89.7	76.2	74.0	77.6
1999-2001 ^b	89.7	88.1	90.3	90.8	89.9	91.1	79.0	77.0	80.2
2002-2004 ^b	90.0	89.3	90.2	91.4	91.1	91.5	77.9	77.6	78.2
2005-2008 ^b	90.8	91.2	90.7	92.1	92.6	92.0	80.3	81.6	79.6
2009-2015 ^b	91.3 ^f	91.1 ^f	91.4 ^f	92.4 ^f	92.4 ^f	92.4 ^f	83.4 ^f	83.3 ^f	83.5 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	90.0	89.6	90.2	91.0	90.7	91.1	81.8	81.0	82.2
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	350,242	79,150	271,092	275,036	57,813	217,223	39,698	10,672	29,026
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	62	55	65	64	55	66	54	47	57
Regional	30	39	28	29	39	27	35	43	33
Distant	6	5	6	6	5	6	9	8	9
Unstaged/Unknown	2	1	2	1	1	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	88.1	-	-	89.3	-	-	79.0	-	-
Ages 45-54	90.8	-	-	91.9	-	-	82.3	-	-
Ages 55-64	90.5	-	-	91.4	-	-	82.8	-	-
Ages 65-74	91.9	-	-	92.5	-	-	84.8	-	-
Ages 75+	86.3	-	-	87.3	-	-	74.8	-	-
Ages <65	90.1	-	-	91.2	-	-	81.7	-	-
Ages 65+	89.6	-	-	90.3	-	-	80.9	-	-
Stage ^e :									
All Stages	89.9	89.6	90.0	90.8	90.8	90.9	81.5	80.8	81.7
Localized	98.8	97.0	99.3	99.2	97.4	99.7	95.5	94.0	96.0
Regional	85.5	86.9	84.9	86.6	88.3	86.0	77.1	77.9	76.7
Distant	27.4	37.1	24.8	28.6	40.6	25.8	19.7	25.9	17.4
Unstaged/Unknown	54.5	75.1	49.7	52.1	76.2	47.6	49.3	65.5	43.1
In Situ ^j	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates

from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

^j In situ cases are not included in the All Stages group.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 5.8
Cancer of the Cervix Uteri (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	58	-	-	47	-	-
1970-1973 ^a	-	-	-	64	-	-	61	-	-
1975-1977 ^b	69.1	82.5	57.9	69.7	83.9	58.1	64.6	75.6	55.1
1978-1980 ^b	67.4	78.4	57.8	68.1	79.8	58.2	61.1	70.7	52.0
1981-1983 ^b	66.9	79.6	54.6	67.8	80.8	54.9	59.2	73.6	46.2
1984-1986 ^b	67.2	77.8	55.3	68.8	79.4	56.4	57.8	68.0	48.1
1987-1989 ^b	70.1	79.6	58.0	72.5	82.6	58.5	56.9	62.7	51.8
1990-1992 ^b	69.6	79.1	56.8	70.9	81.3	56.4	58.1	63.8	51.0
1993-1995 ^b	72.7	81.8	59.9	74.2	83.5	60.1	62.8	70.7	53.3
1996-1998 ^b	72.6	80.9	60.5	73.7	82.7	59.2	65.1	67.8	61.9
1999-2001 ^b	72.4	84.0	56.3	73.3	85.7	55.0	66.2	74.1	56.9
2002-2004 ^b	69.3	79.3	55.9	70.3	81.3	54.6	64.2	72.1	54.6
2005-2008 ^b	70.3	80.2	57.2	71.8	82.8	56.8	60.4	64.9	55.3
2009-2015 ^b	69.3	79.8 ^f	56.5	71.1	82.0	57.5	57.7 ^f	69.5	45.9 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	65.5	76.4	53.7	67.1	77.8	54.8	55.5	66.5	45.2
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	21,802	11,492	10,310	16,233	8,795	7,438	3,011	1,434	1,577
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	44	57	31	46	58	32	35	45	26
Regional	36	30	42	35	29	42	41	38	44
Distant	15	9	22	15	9	22	19	12	25
Unstaged/Unknown	4	4	5	4	3	5	5	4	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	78.7	-	-	80.1	-	-	67.9	-	-
Ages 45-54	65.6	-	-	67.3	-	-	55.5	-	-
Ages 55-64	56.6	-	-	57.1	-	-	47.2	-	-
Ages 65-74	52.8	-	-	52.3	-	-	48.9	-	-
Ages 75+	33.8	-	-	34.4	-	-	27.5	-	-
Ages <65	70.0	-	-	71.5	-	-	59.1	-	-
Ages 65+	45.5	-	-	45.5	-	-	40.4	-	-
Stage ^e :									
All Stages	65.8	76.4	53.9	67.2	77.9	54.6	55.4	65.9	45.5
Localized	91.8	93.9	87.3	92.3	94.6	87.3	87.1	89.8	82.5
Regional	56.3	61.6	52.0	57.2	62.8	52.4	49.4	56.0	44.1
Distant	16.9	20.4	15.2	18.5	23.6	15.9	10.6	9.5	11.2
Unstaged/Unknown	49.0	70.7	32.2	48.5	71.2	30.1	42.8	58.5 ^g	31.8 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.12
Cancer of the Colon and Rectum (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	49.8	49.0	50.7	50.1	49.4	50.8	44.7	43.4	45.9
1978-1980 ^b	51.2	50.2	52.2	51.6	50.6	52.5	45.4	43.4	46.9
1981-1983 ^b	54.0	53.8	54.2	54.4	54.4	54.3	46.5	42.9	49.5
1984-1986 ^b	57.7	57.7	57.6	58.4	58.5	58.3	48.4	47.5	49.1
1987-1989 ^b	59.6	59.8	59.3	60.1	60.6	59.5	52.3	49.9	54.5
1990-1992 ^b	61.2	61.0	61.3	61.9	61.7	62.1	52.9	54.4	51.5
1993-1995 ^b	59.9	59.8	60.0	60.5	60.3	60.7	51.7	51.3	52.0
1996-1998 ^b	62.4	62.4	62.5	63.0	62.9	63.2	54.0	55.2	53.0
1999-2001 ^b	65.2	66.1	64.1	66.6	67.4	65.7	54.4	56.0	53.0
2002-2004 ^b	65.8	65.8	65.9	66.8	67.1	66.4	56.6	55.6	57.5
2005-2008 ^b	66.7	66.7	66.6	67.6	68.0	67.2	58.8	56.4	60.9
2009-2015 ^b	66.2 ^f	66.1 ^f	66.2 ^f	66.9 ^f	67.0 ^f	66.8 ^f	59.5 ^f	58.4 ^f	60.6 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	64.4	63.7	65.1	64.9	64.3	65.5	58.1	55.7	60.3
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	207,609	108,098	99,511	159,611	83,695	75,916	25,894	12,670	13,224
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	39	39	39	39	39	39	38	37	39
Regional	35	35	35	36	36	36	32	32	32
Distant	22	22	21	21	22	21	26	26	25
Unstaged/Unknown	4	4	5	4	4	5	5	4	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	68.7	66.3	71.2	70.0	67.5	72.8	62.0	57.7	65.7
Ages 45-54	70.8	69.1	72.9	71.3	69.6	73.5	64.2	61.3	67.4
Ages 55-64	66.9	65.8	68.5	67.6	66.6	69.0	60.4	58.3	63.0
Ages 65-74	66.9	65.8	68.2	67.2	66.4	68.3	60.0	55.9	64.0
Ages 75+	55.2	54.9	55.5	56.5	55.9	56.8	45.5	43.0	46.5
Ages <65	68.6	67.0	70.5	69.2	67.8	71.2	62.0	59.3	65.0
Ages 65+	60.6	60.7	60.5	61.2	61.3	61.2	53.4	51.3	55.0
Stage ^e :									
All Stages	64.4	64.0	64.9	64.9	64.5	65.3	58.4	56.2	60.4
Localized	89.9	89.3	90.6	90.1	89.3	91.1	86.9	85.7	87.9
Regional	71.3	71.0	71.6	71.9	71.8	72.0	66.1	64.0	68.2
Distant	14.2	13.1	15.3	14.6	13.7	15.6	11.0	9.5	12.4
Unstaged/Unknown	35.4	38.7	32.4	31.8	35.4	28.5	38.8	39.1	38.5

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.13
Cancer of the Colon (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	43	42	44	34	32	35
1970-1973 ^a	-	-	-	49	47	50	37	36	38
1975-1977 ^b	50.6	50.1	51.1	50.9	50.5	51.3	44.8	44.1	45.3
1978-1980 ^b	52.3	51.3	53.2	52.5	51.3	53.4	48.9	47.5	49.8
1981-1983 ^b	55.2	55.6	54.8	55.4	56.2	54.8	48.5	44.7	51.5
1984-1986 ^b	58.3	58.8	57.8	59.0	59.6	58.5	49.2	49.0	49.3
1987-1989 ^b	60.2	60.8	59.7	60.7	61.4	59.9	52.4	50.7	53.8
1990-1992 ^b	62.0	62.3	61.7	62.8	63.1	62.5	53.4	54.6	52.4
1993-1995 ^b	59.8	60.2	59.5	60.5	60.7	60.3	51.1	51.2	50.9
1996-1998 ^b	62.1	62.4	61.9	62.9	62.9	62.8	53.7	55.9	51.9
1999-2001 ^b	64.9	66.2	63.7	66.6	67.9	65.5	52.7	54.2	51.6
2002-2004 ^b	64.8	64.7	64.9	65.7	65.8	65.7	55.6	55.1	56.0
2005-2008 ^b	66.1	66.5	65.7	67.3	68.0	66.7	56.9	55.5	58.0
2009-2015 ^b	64.9 ^f	65.1 ^f	64.7 ^f	66.1 ^f	66.4 ^f	65.9 ^f	56.2 ^f	56.4 ^f	56.0 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	63.1	62.7	63.5	64.0	63.5	64.4	56.0	55.1	56.8
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	143,445	71,200	72,245	110,564	55,268	55,296	18,868	8,886	9,982
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	38	38	37	38	38	38	35	35	35
Regional	35	35	36	36	35	36	34	33	34
Distant	23	23	22	22	23	22	28	28	27
Unstaged/Unknown	4	4	4	4	3	4	4	4	4
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	67.6	65.1	70.0	69.8	67.0	72.8	58.7	55.2	61.5
Ages 45-54	68.1	67.4	68.9	69.2	68.4	70.2	60.1	59.1	61.1
Ages 55-64	65.6	65.1	66.3	66.6	66.1	67.3	58.6	58.0	59.3
Ages 65-74	66.9	65.9	68.0	67.4	66.5	68.5	60.2	57.3	62.8
Ages 75+	56.4	56.0	56.6	57.9	57.3	58.2	45.8	43.6	46.8
Ages <65	66.8	65.9	67.8	68.0	67.0	69.2	59.1	58.0	60.3
Ages 65+	60.9	60.9	60.9	61.8	61.7	61.8	53.5	52.2	54.5
Stage ^e :									
All Stages	63.4	63.2	63.5	64.3	64.1	64.4	56.5	55.6	57.3
Localized	90.4	89.8	91.1	91.0	90.0	92.0	86.4	86.2	86.6
Regional	71.3	71.4	71.3	71.9	72.1	71.8	67.3	66.3	68.1
Distant	13.8	12.8	14.7	14.3	13.5	15.0	10.6	9.4	11.8
Unstaged/Unknown	26.2	31.3	22.1	24.2	29.5	19.9	28.5	31.8	25.6

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 6.14
Cancer of the Rectum (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	38	36	41	27	28	27
1970-1973 ^a	-	-	-	45	43	48	30	20	40
1975-1977 ^b	48.1	47.0	49.5	48.3	47.4	49.5	44.4	41.4	46.8
1978-1980 ^b	48.9	48.4	49.5	49.7	49.3	50.2	34.8	33.5	35.8
1981-1983 ^b	51.4	50.2	52.8	52.0	51.0	53.2	40.3	38.1	42.5
1984-1986 ^b	56.3	55.6	57.1	57.0	56.4	57.7	46.0	43.4	48.5
1987-1989 ^b	58.1	57.9	58.4	58.7	58.9	58.4	52.3	47.7	56.9
1990-1992 ^b	59.2	58.4	60.2	59.9	59.0	61.1	51.2	53.7	48.5
1993-1995 ^b	60.1	59.0	61.6	60.6	59.5	61.9	53.8	51.5	56.4
1996-1998 ^b	63.2	62.5	64.2	63.5	62.9	64.4	55.1	53.6	56.4
1999-2001 ^b	65.9	66.2	65.5	66.5	66.6	66.4	59.6	60.9	58.2
2002-2004 ^b	68.3	68.1	68.6	69.4	70.0	68.6	59.7	56.8	62.5
2005-2008 ^b	68.1	67.3	69.2	68.3	68.0	68.8	64.1	58.4	69.7
2009-2015 ^b	69.1 ^f	68.1 ^f	70.4 ^f	68.6 ^f	68.2 ^f	69.2 ^f	68.0 ^f	62.8 ^f	73.9 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	67.2	65.6	69.3	66.9	65.8	68.3	63.6	57.3	71.0
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	64,164	36,898	27,266	49,047	28,427	20,620	7,026	3,784	3,242
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	41	40	43	40	39	41	45	42	50
Regional	34	36	33	36	37	34	28	30	25
Distant	19	19	18	19	20	19	20	23	18
Unstaged/Unknown	5	5	6	5	4	5	7	6	7
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	70.5	68.1	73.3	70.4	68.3	72.9	68.7	62.1	75.3
Ages 45-54	74.6	71.3	79.2	74.2	71.1	78.5	72.2	65.2	80.4
Ages 55-64	69.2	66.9	73.0	69.2	67.3	72.4	64.7	58.9	73.1
Ages 65-74	66.9	65.7	68.7	66.8	66.1	67.7	59.3	51.6	68.4
Ages 75+	50.9	51.4	50.5	51.1	51.6	50.6	43.6	40.3	44.9
Ages <65	71.5	68.7	75.5	71.3	68.8	74.9	68.2	61.7	76.5
Ages 65+	59.7	60.1	59.2	59.5	60.2	58.7	53.0	48.3	57.4
Stage ^e :									
All Stages	66.7	65.4	68.5	66.4	65.4	67.7	63.3	57.9	69.6
Localized	88.9	88.4	89.6	88.5	88.0	89.1	87.8	85.0	90.5
Regional	71.1	70.3	72.4	71.8	71.2	72.8	62.4	57.7	68.7
Distant	15.1	13.7	17.2	15.6	14.2	17.6	12.2	10.0	15.5
Unstaged/Unknown	50.4	48.8	52.1	45.6	44.4	46.9	54.1	48.6	59.2

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 7.8
Cancer of the Corpus and Uterus, NOS (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	73	-	-	31	-	-
1970-1973 ^a	-	-	-	81	-	-	44	-	-
1975-1977 ^b	86.9	92.7	86.2	88.0	93.3	87.4	60.2	84.4 ^g	55.6
1978-1980 ^b	82.5	91.7	81.3	83.7	93.0	82.6	54.9	82.3 ^g	49.5
1981-1983 ^b	80.7	91.2	79.4	82.2	92.3	81.1	50.7	82.8 ^g	45.6
1984-1986 ^b	82.5	93.6	81.1	84.0	93.9	82.8	56.2	83.5 ^g	52.7
1987-1989 ^b	82.3	89.8	81.2	83.9	90.9	83.0	56.7	82.8 ^g	52.9
1990-1992 ^b	83.7	90.1	82.7	85.8	92.3	84.9	54.0	72.9 ^g	50.2
1993-1995 ^b	83.2	90.0	82.0	84.9	91.5	83.8	58.6	81.7	54.0
1996-1998 ^b	83.5	90.1	82.4	85.2	91.3	84.2	61.7	82.2	57.3
1999-2001 ^b	84.2	88.7	83.3	85.9	89.9	85.2	61.4	70.9	58.9
2002-2004 ^b	83.0	90.1	81.6	85.3	92.5	84.1	60.4	78.0	55.9
2005-2008 ^b	83.6	88.3	82.8	85.7	90.1	85.0	65.1	73.7	63.4
2009-2015 ^b	82.9 ^f	89.0 ^f	82.0 ^f	85.6 ^f	90.1 ^f	85.0 ^f	64.2 ^f	81.9	61.5 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	81.0	87.8	79.9	83.3	89.0	82.5	62.1	77.4	59.8
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	79,717	10,999	68,718	63,219	8,072	55,147	8,509	1,071	7,438
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	67	71	66	69	72	68	54	62	53
Regional	21	17	21	20	17	21	24	20	25
Distant	9	8	9	8	7	8	17	13	17
Unstaged/Unknown	3	4	3	3	4	3	5	6	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	89.4	-	-	90.3	-	-	80.1	-	-
Ages 45-54	86.4	-	-	87.7	-	-	71.9	-	-
Ages 55-64	84.2	-	-	86.7	-	-	65.8	-	-
Ages 65-74	78.1	-	-	81.4	-	-	56.8	-	-
Ages 75+	67.1	-	-	70.5	-	-	41.2	-	-
Ages <65	85.5	-	-	87.4	-	-	69.2	-	-
Ages 65+	74.3	-	-	77.5	-	-	52.0	-	-
Stage ^e :									
All Stages	81.2	88.2	80.0	83.5	89.2	82.7	62.2	79.4	59.6
Localized	95.0	96.3	94.8	95.9	96.6	95.8	85.8	92.3	84.6
Regional	69.0	81.2	67.3	71.6	82.2	70.4	49.8	72.5	47.2
Distant	16.8	31.2	14.8	18.1	32.5	16.1	9.7	25.4	8.1
Unstaged/Unknown	52.9	89.0	45.6	52.0	89.3	45.5	43.6	81.5 ^g	37.7

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 8.8
Cancer of the Esophagus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	4	4	6	1	0	2
1970-1973 ^a	-	-	-	4	4	4	4	4	3
1975-1977 ^b	5.0	4.0	7.5	5.5	4.8	7.0	3.5	2.0	7.7
1978-1980 ^b	5.0	4.8	5.6	5.3	5.3	5.2	4.3	3.4	6.8
1981-1983 ^b	6.7	6.1	8.2	7.3	6.5	9.0	4.6	4.0	6.5
1984-1986 ^b	9.6	8.4	12.2	10.3	9.0	13.2	8.7	8.2	9.9
1987-1989 ^b	9.4	9.4	9.4	10.4	11.0	9.0	6.6	5.3	10.2
1990-1992 ^b	12.2	11.7	13.4	12.9	12.2	14.8	9.4	9.7	8.4
1993-1995 ^b	12.1	12.2	11.7	13.3	13.6	12.7	7.6	7.8	6.9
1996-1998 ^b	13.4	13.0	14.4	14.2	14.0	14.7	10.2	8.5	13.6
1999-2001 ^b	18.1	17.7	19.5	18.9	18.7	19.7	12.4	10.6	16.2
2002-2004 ^b	18.2	18.0	18.9	19.6	19.6	19.5	10.7	8.0	15.7
2005-2008 ^b	19.9	20.0	19.3	20.8	20.9	20.2	14.3	14.5	14.0
2009-2015 ^b	21.4 ^f	21.0 ^f	22.8 ^f	22.6 ^f	22.5 ^f	23.4 ^f	11.8 ^f	9.2 ^f	16.1 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	20.6	19.9	23.6	21.5	20.9	24.2	13.5	11.9	16.9
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	21,583	17,092	4,491	18,182	14,681	3,501	2,160	1,459	701
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	18	18	21	19	18	21	16	15	19
Regional	32	32	32	32	32	31	32	31	34
Distant	40	41	33	40	41	33	41	44	35
Unstaged/Unknown	10	9	14	10	8	14	11	10	13
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	20.0	18.4	26.3	19.5	19.0	22.0 ^g	17.1 ^g	7.2	-
Ages 45-54	21.2	20.3	26.1	22.6	21.7	28.5	13.1	12.2	15.0
Ages 55-64	21.3	20.4	26.0	23.0	22.2	28.0	11.9	8.9	19.1
Ages 65-74	23.0	22.1	26.9	23.8	22.9	28.1	14.8	13.0	17.8
Ages 75+	13.4	13.7	12.8	13.4	13.9	12.5	11.7	10.5	12.2
Ages <65	21.2	20.3	26.1	22.7	21.9	27.7	12.5	9.9	18.9
Ages 65+	18.7	18.7	18.8	19.1	19.2	18.8	13.6	12.3	15.5
Stage ^e :									
All Stages	19.9	19.4	21.5	20.7	20.4	21.9	13.0	10.8	17.4
Localized	46.7	49.2	38.4	48.4	51.1	38.7	29.2	27.0	32.5 ^g
Regional	25.1	24.3	28.4	26.0	25.3	29.4	18.0	16.1	21.5
Distant	4.8	4.2	8.1	4.9	4.4	7.7	3.5	1.9	7.2
Unstaged/Unknown	12.7	12.6	12.9	12.9	13.0	12.7	9.4	7.7	11.7

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 9.8
Hodgkin Lymphoma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	40	34	48	-	-	-
1970-1973 ^a	-	-	-	67	66	69	-	-	-
1975-1977 ^b	71.8	69.9	74.3	72.1	70.1	74.6	70.1	68.5 ^g	73.3 ^g
1978-1980 ^b	71.7	70.3	73.5	71.8	69.8	74.3	70.6	74.7 ^g	63.1 ^g
1981-1983 ^b	74.3	72.9	76.0	74.6	73.7	75.7	71.8	69.6 ^g	75.9 ^g
1984-1986 ^b	78.4	76.6	80.7	78.8	76.9	81.2	74.9	76.0 ^g	72.1 ^g
1987-1989 ^b	79.2	76.6	82.5	79.7	76.8	83.3	72.3	70.9 ^g	74.0 ^g
1990-1992 ^b	81.8	79.3	84.7	82.9	81.1	85.0	74.3	65.2	84.3
1993-1995 ^b	81.7	79.3	84.6	82.2	80.1	84.7	78.3	74.0	83.0
1996-1998 ^b	85.1	84.4	85.9	85.7	84.4	87.3	81.2	84.4	77.7
1999-2001 ^b	85.1	82.8	87.9	85.7	84.0	87.8	81.6	75.4	89.8
2002-2004 ^b	86.2	85.2	87.2	87.7	86.9	88.5	79.2	74.4	82.8
2005-2008 ^b	89.0	87.9	90.2	89.5	88.8	90.2	86.6	83.3	90.3
2009-2015 ^b	88.5 ^f	87.5 ^f	89.9 ^f	89.3 ^f	88.5 ^f	90.4 ^f	85.1 ^f	81.6 ^f	89.2 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	86.7	85.4	88.3	87.2	85.8	88.8	83.8	81.9	86.2
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	14,589	8,077	6,512	11,597	6,424	5,173	1,896	1,054	842
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	15	16	14	15	16	13	17	17	16
Regional	39	35	45	41	36	47	31	26	37
Distant	41	45	37	40	44	36	50	55	43
Unstaged/Unknown	4	5	4	4	4	4	3	3	3
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	94.4	93.6	95.3	95.2	94.7	95.7	89.5	85.8	93.7
Ages 45-54	85.8	83.6	89.6	87.2	85.8	89.6	79.6	74.6	86.8
Ages 55-64	79.3	78.1	80.8	80.0	78.8	81.6	71.7	69.0	73.8 ^g
Ages 65-74	67.4	66.2	68.8	66.7	64.4	69.7	68.9 ^g	77.3 ^h	59.8 ^h
Ages 75+	46.2	46.8	45.2	47.0	46.4	46.9	39.5 ^g	-	-
Ages <65	91.2	89.8	92.9	92.0	90.9	93.3	85.7	81.9	90.3
Ages 65+	58.0	58.4	57.4	58.0	56.9	58.7	61.2 ^g	70.0 ^g	52.8 ^g
Stage ^e :									
All Stages	86.6	85.6	87.8	86.8	85.9	87.9	84.1	81.2	87.5
Localized	91.6	91.5	91.6	91.5	91.3	91.6	91.6	91.9	91.0
Regional	93.5	92.3	94.6	93.5	92.3	94.7	93.0	91.0	94.1
Distant	78.4	78.5	78.2	78.7	79.3	77.7	76.2	72.7	81.4
Unstaged/Unknown	83.0	81.6	84.4	81.8	78.6	85.2	77.2 ^g	85.6 ^g	68.2 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.^d Based on follow-up of patients into 2016.

Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).^g The standard error is between 5 and 10 percentage points.^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 10.6
Kaposi Sarcoma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	80.7 ^f	80.1 ^f	-	79.9 ^f	79.0 ^f	-	-	-	-
1978-1980 ^b	78.3 ^f	79.4 ^f	73.1 ^g	78.0 ^f	78.4 ^f	72.5 ^g	-	-	-
1981-1983 ^b	35.7	33.4	64.3 ^g	34.0	31.6	64.2 ^g	-	-	-
1984-1986 ^b	13.0	11.7	70.5 ^g	12.8	11.4	70.2 ^g	16.8	15.7	-
1987-1989 ^b	9.9	9.3	68.5 ^g	9.4	8.8	72.3 ^g	12.4	11.3	-
1990-1992 ^b	9.3	8.5	53.9 ^f	8.9	8.2	55.4 ^f	11.8	10.8	-
1993-1995 ^b	21.8	21.1	53.8 ^f	22.1	21.3	62.1 ^g	17.5	16.7	-
1996-1998 ^b	52.4	51.5	71.4 ^g	57.0	55.8	85.9 ^f	40.2	39.7	-
1999-2001 ^b	58.2	57.8	61.0 ^f	64.8	63.1	79.2 ^f	44.1	45.6	-
2002-2004 ^b	64.7	63.8	71.1 ^g	75.2	74.1	76.9 ^g	42.0	42.2	-
2005-2008 ^b	74.0	74.0	70.4 ^f	80.7	80.7	75.2 ^f	60.9	61.0	-
2009-2015 ^b	76.4 ^e	76.4	75.3 ^f	82.5	82.3	79.1 ^f	64.5	65.6	37.3 ^g
5-Year Period Survival (Percent) ^{cd}									
2015	75.4	74.8	79.3	77.7	76.5	81.5	66.2	67.8	35.6
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	68.6	69.3	44.8 ^g	71.8	71.9	-	62.6	63.7	38.6 ^g
Ages 45-54	73.3	73.6	-	74.6	74.3	-	66.0	68.0	-
Ages 55-64	79.7	79.6	-	80.9	79.7	-	74.7 ^f	79.6 ^f	-
Ages 65-74	85.9	86.4	82.2 ^f	85.7	85.0	86.8 ^f	-	-	-
Ages 75+	84.5	81.9 ^f	82.9 ^f	84.1	83.0 ^f	80.1 ^f	-	-	-
Ages <65	71.5	71.9	59.6 ^f	74.4	74.1	84.1 ^f	64.1	65.6	33.9 ^g
Ages 65+	86.0	84.5	84.0	86.0	84.3	83.1 ^f	69.8 ^g	-	-

^a

Based on End Results data from a series of hospital registries and one population-based registry.

^b

SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^c

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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^d

Based on follow-up of patients into 2016.

Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival),

(2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^eThe difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).^f

The standard error is between 5 and 10 percentage points.

^g

The standard error is greater than 10 percentage points.

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Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 11.8
Cancer of the Kidney and Renal Pelvis (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	37	36	39	38	38	37
1970-1973 ^a	-	-	-	46	44	50	44	40	49
1975-1977 ^b	50.1	50.2	49.8	49.8	50.1	49.3	48.8	47.9	50.4 ^g
1978-1980 ^b	52.9	52.7	53.3	52.6	52.8	52.1	56.9	51.9	62.8 ^g
1981-1983 ^b	50.0	51.1	48.2	49.9	51.2	47.6	50.6	50.2	51.2
1984-1986 ^b	54.5	55.0	53.7	54.7	55.4	53.5	52.6	49.2	57.5
1987-1989 ^b	56.7	57.1	56.1	57.3	58.0	56.1	54.8	53.0	57.0
1990-1992 ^b	60.2	60.6	59.6	60.7	61.3	59.7	57.0	55.2	59.1
1993-1995 ^b	61.5	61.7	61.1	62.0	62.9	60.7	57.6	54.2	62.1
1996-1998 ^b	62.5	62.9	61.9	62.1	62.6	61.2	66.9	68.1	64.5
1999-2001 ^b	64.9	63.4	67.2	64.9	63.6	66.9	64.1	59.4	69.4
2002-2004 ^b	69.2	69.5	68.9	69.3	69.8	68.7	65.5	64.7	66.7
2005-2008 ^b	74.5	73.5	76.0	74.5	73.5	76.0	74.7	73.5	76.5
2009-2015 ^b	75.5 ^f	74.8 ^f	76.6 ^f	75.3 ^f	74.7 ^f	76.4 ^f	77.1 ^f	77.1 ^f	77.2 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	75.3	74.4	76.8	75.2	74.2	76.8	76.8	75.8	78.3
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	79,409	49,836	29,573	64,244	40,612	23,632	9,274	5,502	3,772
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	65	63	68	64	63	67	71	70	73
Regional	17	18	15	17	18	15	12	12	11
Distant	16	16	14	16	17	14	14	15	12
Unstaged/Unknown	3	3	3	3	3	3	3	3	3
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	88.4	86.6	91.1	90.0	88.3	92.5	80.7	76.7	86.3
Ages 45-54	81.2	79.4	84.6	80.9	79.0	84.8	80.8	80.1	82.1
Ages 55-64	76.0	74.5	79.0	76.1	74.7	79.1	75.8	73.7	79.2
Ages 65-74	73.6	72.6	75.3	73.7	72.6	75.8	73.6	74.1	73.1
Ages 75+	59.4	60.7	58.0	59.6	60.8	58.0	58.4	57.4	58.5
Ages <65	80.0	78.2	83.4	80.2	78.4	83.7	78.4	76.5	81.7
Ages 65+	67.8	68.2	67.2	67.8	68.1	67.4	68.6	69.6	67.4
Stage ^e :									
All Stages	74.8	74.2	75.9	74.8	74.0	76.0	75.1	74.5	76.0
Localized	92.5	92.6	92.4	92.7	92.5	93.0	91.4	92.4	90.0
Regional	69.6	70.5	67.8	70.3	71.3	68.1	60.8	59.9	62.2
Distant	12.0	12.0	12.1	12.2	12.3	11.9	10.2	8.4	13.3
Unstaged/Unknown	41.9	42.6	40.7	39.8	40.2	38.5	47.0	51.2 ^g	41.6 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 12.8
Cancer of the Larynx (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	53	54	46	-	-	-
1970-1973 ^a	-	-	-	62	63	56	-	-	-
1975-1977 ^b	66.0	66.6	62.6	66.7	67.4	62.3	58.2	57.1	63.3 ^g
1978-1980 ^b	65.3	65.5	64.6	66.2	66.4	65.4	56.9	57.2	55.8 ^g
1981-1983 ^b	68.1	68.4	66.9	69.5	69.8	68.5	56.5	57.7	50.7 ^g
1984-1986 ^b	65.3	65.9	62.2	67.0	67.6	64.0	53.3	53.7	51.1 ^g
1987-1989 ^b	65.5	66.6	61.0	67.0	68.5	60.7	56.1	54.3	61.3 ^g
1990-1992 ^b	65.8	66.7	62.3	67.7	68.5	64.4	53.7	54.3	51.3 ^g
1993-1995 ^b	63.6	65.2	56.6	65.1	67.0	57.6	53.1	54.4	47.4 ^g
1996-1998 ^b	65.0	66.8	58.8	66.9	68.5	61.2	53.7	56.6	45.0 ^g
1999-2001 ^b	63.3	64.2	59.6	65.2	66.3	60.8	49.8	49.1	52.4 ^g
2002-2004 ^b	61.8	62.1	60.7	64.3	64.2	64.8	50.8	53.6	41.4 ^g
2005-2008 ^b	62.9	63.4	60.4	64.6	65.1	62.5	52.1	52.6	49.7 ^g
2009-2015 ^b	62.0 ^f	62.8 ^f	58.6	63.9	64.7	60.7	50.0	51.3	45.8
5-Year Period Survival (Percent) ^{cd}									
2015	60.3	60.9	57.8	61.5	62.2	58.5	50.5	50.2	51.4
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	16,146	13,037	3,109	12,847	10,366	2,481	2,532	2,003	529
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	54	56	48	56	57	49	45	47	36
Regional	23	21	32	22	20	31	25	23	36
Distant	20	20	18	18	19	17	27	28	25
Unstaged/Unknown	4	4	3	4	4	3	2	2	3
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	77.1	73.0	87.0	81.5	77.5	90.0	59.7 ^g	56.9 ^g	-
Ages 45-54	61.3	61.5	60.3	63.6	63.3	64.6	50.6	52.9	43.3 ^g
Ages 55-64	60.5	60.4	60.8	61.7	61.8	61.3	52.2	51.5	55.1
Ages 65-74	59.3	60.4	53.7	60.0	60.9	55.5	50.3	52.6	40.1 ^g
Ages 75+	57.6	60.3	47.1	58.3	61.3	46.5	46.8 ^g	46.7 ^g	46.4 ^h
Ages <65	61.7	61.4	63.0	63.6	63.1	65.2	52.1	52.1	51.7
Ages 65+	58.6	60.2	51.1	59.3	60.9	51.8	49.3	50.9	42.6 ^g
Stage ^e :									
All Stages	60.3	60.9	57.8	61.5	62.1	59.2	51.1	51.7	48.7
Localized	77.4	78.2	73.4	77.6	78.2	74.7	72.1	74.2	61.8
Regional	44.7	43.5	48.1	45.7	44.6	48.9	39.3	37.1	44.7
Distant	33.3	32.9	35.3	33.7	33.5	34.4	30.9	29.5	36.5
Unstaged/Unknown	51.2	52.9	41.6 ^g	52.7	54.4	41.8 ^g	32.0 ^g	30.4 ^g	-

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 13.14
Leukemia

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	14	-	-	-	-	-
1970-1973 ^a	-	-	-	22	-	-	-	-	-
1975-1977 ^b	34.1	33.0	35.6	34.5	33.6	35.8	33.4	30.4	36.7
1978-1980 ^b	36.0	35.0	37.3	36.7	35.8	38.0	28.2	27.3	29.3
1981-1983 ^b	37.3	36.9	37.8	38.1	37.8	38.5	33.9	33.4	34.3
1984-1986 ^b	40.5	40.1	41.1	41.6	41.3	42.0	32.7	31.5	34.1
1987-1989 ^b	42.9	44.0	41.3	43.9	45.5	41.8	35.0	32.7	37.8
1990-1992 ^b	45.2	44.6	46.1	46.5	46.3	46.8	35.7	30.5	41.3
1993-1995 ^b	47.6	48.4	46.4	48.7	49.5	47.5	41.3	41.6	40.9
1996-1998 ^b	48.4	48.6	48.1	49.8	49.7	49.8	38.6	39.0	38.0
1999-2001 ^b	51.0	52.0	49.5	52.0	53.0	50.7	43.7	45.1	42.1
2002-2004 ^b	58.3	58.4	58.1	59.1	59.4	58.8	54.0	54.3	53.4
2005-2008 ^b	62.3	63.5	60.7	63.3	64.3	62.0	56.0	59.9	51.1
2009-2015 ^b	65.8 ^e	67.3 ^e	63.7 ^e	66.8 ^e	68.2 ^e	64.9 ^e	59.6 ^e	60.9 ^e	58.2 ^e
5-Year Period Survival (Percent) ^{cd}									
2015	63.2	64.3	61.9	63.4	64.0	62.4	58.2	61.7	54.4
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	76.2	75.8	76.8	77.3	76.4	78.6	67.7	67.7	67.7
Ages 45-54	72.2	73.7	69.8	73.5	74.6	71.6	62.8	66.2	58.6
Ages 55-64	69.3	69.9	68.3	70.4	70.7	69.8	58.9	60.5	56.6
Ages 65-74	61.0	61.0	61.1	61.4	61.0	62.0	54.1	55.3	52.3
Ages 75+	42.1	42.4	41.7	42.7	42.8	42.5	33.7	35.7	31.6
Ages <65	72.9	73.1	72.5	73.9	73.8	74.1	63.7	65.0	62.1
Ages 65+	50.8	51.7	49.6	51.1	51.8	50.2	44.6	47.4	41.5

^a Based on End Results data from a series of hospital registries and one population-based registry.^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.^d Based on follow-up of patients into 2016.

Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).^f The standard error is between 5 and 10 percentage points.^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 13.15
Lymphocytic Leukemia

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Acute Lymphocytic Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	40.6	36.9	45.6	40.8	37.4	45.7	33.5 ^e	-	-
...									
1987-1989 ^a	54.4	53.7	55.2	55.0	54.7	55.3	44.7 ^e	42.0 ^e	47.1 ^e
1990-1992 ^a	58.0	54.5	63.1	57.7	54.9	62.0	57.1 ^e	50.4 ^e	63.3 ^e
1993-1995 ^a	60.2	57.8	63.6	59.8	57.8	62.7	53.2 ^e	45.9 ^e	63.8 ^e
1996-1998 ^a	65.5	64.4	66.9	66.4	64.3	69.0	55.6 ^e	59.1 ^e	50.2 ^e
1999-2001 ^a	63.5	63.4	63.5	64.8	65.2	64.2	56.6 ^e	50.3 ^e	63.0 ^e
2002-2004 ^a	67.3	66.1	68.9	67.6	66.6	69.1	64.5 ^e	59.4 ^e	69.7 ^e
2005-2008 ^a	70.1	69.3	71.3	70.0	68.6	72.0	65.2	70.0	55.1 ^e
2009-2015 ^a	71.7 ^d	72.3 ^d	71.0 ^d	72.6 ^d	73.7 ^d	71.3 ^d	62.5 ^d	60.7	64.7 ^e
5-Year Period Survival (Percent) ^{bc}									
2015	69.1	68.4	69.8	68.5	67.4	70.0	65.0	65.0	64.8
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	80.6	79.5	82.1	80.7	79.1	82.8	76.3	75.7	77.0
Ages 45-54	38.1	36.5	40.3	37.9	37.3	38.9	25.7 ^e	-	-
Ages 55-64	28.0	27.5	28.4	29.4	28.8	29.8	17.3 ^e	22.8 ^e	-
Ages 65-74	23.9	18.8	29.1	21.4	17.0	25.9	-	-	-
Ages 75+	9.1	9.7	8.3	10.0	9.6	10.0	0.0	-	-
Ages <65	73.3	72.5	74.3	73.5	72.4	74.9	66.8	66.8	66.8
Ages 65+	17.4	15.1	19.6	16.6	14.1	19.1	15.4 ^e	-	18.9 ^e
<u>Chronic Lymphocytic Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	67.1	64.7	70.3	67.9	65.4	71.1	56.9 ^e	55.1 ^e	59.0 ^e
...									
1987-1989 ^a	72.7	72.7	72.9	73.9	74.0	73.7	58.1	55.5 ^e	61.5 ^e
1990-1992 ^a	74.1	71.8	77.3	75.3	73.1	78.4	52.2	43.4 ^e	60.9 ^e
1993-1995 ^a	77.2	77.1	77.3	78.3	78.1	78.6	63.3	64.0 ^e	62.1 ^e
1996-1998 ^a	75.6	73.9	77.8	76.7	75.2	78.7	58.1	51.5 ^e	66.0 ^e
1999-2001 ^a	78.6	78.2	79.2	79.4	78.8	80.3	66.6	65.5 ^e	66.6 ^e
2002-2004 ^a	84.0	83.2	85.2	84.5	83.7	85.6	77.0	74.2 ^e	80.7 ^e
2005-2008 ^a	86.2	86.1	86.3	86.4	86.3	86.4	84.1	85.7	81.2
2009-2015 ^a	88.2 ^d	88.7 ^d	87.5 ^d	88.6 ^d	88.9 ^d	88.3 ^d	78.5 ^d	80.1 ^d	76.3
5-Year Period Survival (Percent) ^{bc}									
2015	85.6	85.5	85.8	85.3	84.8	86.0	77.2	81.8	71.0
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	94.0	92.7	96.0	94.2	93.2	95.4	90.5 ^e	87.9 ^e	-
Ages 45-54	93.9	93.4	94.8	94.5	93.5	96.4	84.0	88.9	76.1 ^e
Ages 55-64	92.2	91.6	93.3	92.4	91.6	93.8	83.6	83.1	84.3
Ages 65-74	87.4	85.6	90.5	87.6	85.3	91.3	77.3	78.4	75.6
Ages 75+	73.1	72.7	73.6	72.9	72.4	73.4	58.4	58.6 ^e	56.4 ^e
Ages <65	92.8	92.2	93.9	93.1	92.3	94.7	84.3	85.4	82.4
Ages 65+	80.1	79.6	80.7	79.9	79.2	80.7	69.1	71.3	66.2

a

SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

b

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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

c

Based on follow-up of patients into 2016.

Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival),

(2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

d

The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

e

The standard error is between 5 and 10 percentage points.

f

The standard error is greater than 10 percentage points.

-

Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 13.16
Myeloid Leukemia

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Acute Myeloid Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	6.2	5.5	7.0	5.8	5.4	6.2	10.1	8.2	11.7
...									
1987-1989 ^a	11.5	9.2	14.1	11.3	9.7	13.2	9.2	4.4	15.7 ^e
1990-1992 ^a	13.8	12.6	15.2	13.5	12.2	15.0	13.5	12.9	13.9
1993-1995 ^a	16.1	14.9	17.4	15.3	14.1	16.7	21.5	20.6 ^e	22.0
1996-1998 ^a	17.0	15.9	18.3	15.6	14.5	17.1	22.1	25.2	18.2
1999-2001 ^a	19.2	18.8	19.7	18.7	17.6	19.9	19.3	24.8	14.2
2002-2004 ^a	23.4	20.9	26.4	23.2	20.8	26.0	25.3	26.5	24.0
2005-2008 ^a	24.9	23.5	26.5	24.2	22.8	25.7	23.9	19.3	27.7
2009-2015 ^a	29.4 ^d	29.1 ^d	29.8 ^d	29.0 ^d	28.4 ^d	29.9 ^d	29.2 ^d	28.0 ^d	30.1 ^d
5-Year Period Survival (Percent) ^{bc}									
2015	28.6	27.8	29.4	28.2	27.6	28.9	28.3	26.2	30.1
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	60.4	58.5	62.4	62.1	59.9	64.5	51.1	48.2	53.8
Ages 45-54	44.1	43.9	44.4	45.6	45.0	46.3	33.7	34.2	33.6
Ages 55-64	30.0	28.1	32.5	30.8	28.5	33.8	23.1	23.4	22.4
Ages 65-74	13.9	13.7	14.1	14.5	14.4	14.6	10.3	7.8	13.1
Ages 75+	3.4	4.0	2.7	3.4	4.1	2.7	2.4	-	2.0
Ages <65	46.6	44.4	49.1	47.4	44.9	50.4	39.3	37.1	41.4
Ages 65+	7.9	8.5	7.2	8.2	8.9	7.3	6.4	5.8	7.1
<u>Chronic Myeloid Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	21.8	19.3	25.1	20.5	18.4	23.4	27.7 ^e	21.6 ^e	35.5 ^e
...									
1987-1989 ^a	30.3	30.6	29.8	30.1	31.0	29.0	33.3 ^e	28.1 ^e	41.3 ^e
1990-1992 ^a	30.7	29.6	32.2	30.3	30.0	30.6	34.9 ^e	25.5 ^e	44.9 ^e
1993-1995 ^a	35.5	35.3	35.8	35.2	35.1	35.2	35.6 ^e	32.8 ^e	40.2 ^e
1996-1998 ^a	37.1	37.7	36.3	38.0	37.6	38.5	31.0	30.4 ^e	31.4 ^e
1999-2001 ^a	47.3	45.9	49.2	45.9	44.1	48.3	49.0 ^e	49.6 ^e	48.1 ^e
2002-2004 ^a	54.3	53.0	56.1	52.6	51.4	54.1	63.0 ^e	62.1 ^e	64.0 ^e
2005-2008 ^a	63.1	63.2	62.9	61.7	61.5	62.1	64.3	66.4 ^e	60.8 ^e
2009-2015 ^a	69.7 ^d	68.1 ^d	71.8 ^d	69.0 ^d	67.7 ^d	70.7 ^d	73.6 ^d	71.1 ^d	76.3 ^d
5-Year Period Survival (Percent) ^{bc}									
2015	69.5	68.3	71.2	68.1	66.6	70.2	72.3	71.4	73.5
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	89.9	88.9	91.3	91.6	90.5	93.4	79.7	78.6	81.2
Ages 45-54	87.4	86.0	89.1	87.1	85.8	88.8	87.1	84.2	90.0
Ages 55-64	77.6	74.8	81.6	78.1	75.0	82.6	69.8	67.6 ^e	71.9 ^e
Ages 65-74	61.1	57.9	65.6	60.9	57.8	65.4	58.4 ^e	52.6 ^e	63.7 ^e
Ages 75+	32.6	30.5	34.6	32.1	30.2	33.6	36.2 ^e	36.2 ^f	36.2 ^e
Ages <65	85.1	83.6	87.3	85.6	83.9	88.3	79.0	77.3	80.8
Ages 65+	46.2	44.4	48.4	45.6	44.1	47.5	49.5	47.1 ^e	51.5 ^e

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^b 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^c Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).
^d The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).^e The standard error is between 5 and 10 percentage points.^f The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 14.8
Cancer of the Liver and Intrahepatic Bile Duct (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	3.4	1.8	6.3	3.4	1.9	5.8	1.8	0.0	5.6
1978-1980 ^b	3.3	2.2	5.4	3.3	2.2	4.8	3.6	3.0	5.0
1981-1983 ^b	3.7	2.9	5.2	4.0	3.0	5.5	2.8	2.1	4.7
1984-1986 ^b	5.7	3.7	9.5	5.7	3.7	9.1	4.4	2.1	9.1
1987-1989 ^b	4.9	3.2	8.0	5.7	3.4	9.4	2.7	1.6	4.9
1990-1992 ^b	5.6	5.0	7.0	6.2	5.1	8.3	2.6	2.0	3.6
1993-1995 ^b	5.6	5.3	6.1	5.2	4.9	5.7	4.0	2.8	7.3
1996-1998 ^b	8.6	8.3	9.1	8.4	7.6	10.2	4.6	5.9	2.0
1999-2001 ^b	11.3	10.9	12.1	10.3	9.6	11.7	7.6	6.8	9.5
2002-2004 ^b	14.9	14.9	14.7	14.1	14.6	13.1	9.6	7.3	15.8
2005-2008 ^b	17.8	17.8	17.8	16.9	17.0	16.4	12.7	11.9	15.1
2009-2015 ^b	19.5 ^f	19.6 ^f	19.2 ^f	18.8 ^f	19.0 ^f	18.1 ^f	15.8 ^f	16.1	14.8 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	18.9	18.6	19.8	18.1	17.9	18.7	16.0	15.1	18.4
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	49,362	36,019	13,343	34,575	25,356	9,219	6,447	4,799	1,648
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	44	44	44	44	44	43	42	42	44
Regional	27	28	25	27	27	25	29	30	28
Distant	18	18	18	18	17	19	19	19	18
Unstaged/Unknown	11	10	13	12	11	13	9	9	11
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	39.8	36.6	45.9	46.5	43.5	51.3	25.7	24.4	28.1 ^g
Ages 45-54	20.2	18.6	26.7	19.7	18.0	26.6	14.4	13.4	17.2
Ages 55-64	20.7	19.9	24.1	20.5	19.9	23.3	15.6	13.9	21.9
Ages 65-74	17.2	16.6	18.8	15.3	14.9	16.1	15.8	15.2	17.3
Ages 75+	8.7	8.8	8.5	7.4	8.0	6.6	7.2	5.8	7.8
Ages <65	21.8	20.4	27.2	21.8	20.4	27.3	15.9	14.3	21.4
Ages 65+	13.5	13.6	13.2	11.8	12.3	11.0	13.1	13.1	13.0
Stage ^e :									
All Stages	18.4	18.0	19.5	17.7	17.5	18.3	15.1	14.1	18.2
Localized	32.6	32.1	34.1	31.2	30.9	32.1	27.4	25.4	33.1
Regional	10.8	10.4	12.1	10.9	10.6	12.2	8.1	7.6	9.5
Distant	2.4	2.0	3.4	2.5	2.1	3.7	1.3	1.4	1.0
Unstaged/Unknown	6.6	6.2	7.6	5.7	5.4	6.3	9.0	9.1	8.7

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.12
Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	8	7	11	5	5	6
1970-1973 ^a	-	-	-	10	9	14	7	6	10
1975-1977 ^b	12.2	11.1	15.3	12.3	11.1	15.5	11.2	10.5	13.8
1978-1980 ^b	12.8	11.3	16.3	12.9	11.5	16.2	11.7	9.7	17.8
1981-1983 ^b	13.1	11.5	16.4	13.3	11.7	16.6	11.4	10.2	14.9
1984-1986 ^b	12.8	11.2	16.0	13.0	11.2	16.3	11.1	10.3	12.8
1987-1989 ^b	13.0	11.9	15.0	13.3	12.0	15.3	10.9	10.8	11.1
1990-1992 ^b	13.6	12.1	15.9	14.0	12.5	16.2	10.5	9.3	12.7
1993-1995 ^b	14.3	12.5	16.9	14.5	12.6	17.1	12.8	11.2	15.7
1996-1998 ^b	14.6	12.9	16.8	14.8	13.1	17.0	12.3	10.6	15.1
1999-2001 ^b	15.3	13.1	17.9	15.5	13.4	18.0	12.7	10.8	15.4
2002-2004 ^b	16.1	14.2	18.4	16.5	14.4	18.9	13.3	12.8	13.9
2005-2008 ^b	18.1	15.6	20.8	18.5	16.0	21.2	14.7	12.5	17.2
2009-2015 ^b	20.6 ^f	17.2 ^f	24.3 ^f	20.7 ^f	17.3 ^f	24.2 ^f	19.3 ^f	15.8 ^f	23.0 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	20.2	16.7	23.8	20.3	16.9	23.8	17.8	14.4	21.8
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	263,385	137,877	125,508	212,884	110,083	102,801	30,661	16,749	13,912
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	16	14	18	17	15	19	14	12	15
Regional	22	22	22	22	22	22	22	21	23
Distant	57	59	55	56	58	54	61	64	58
Unstaged/Unknown	4	4	5	5	4	5	3	3	3
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	34.6	29.5	39.3	36.2	30.8	41.2	27.4	23.9	31.6
Ages 45-54	22.1	17.5	27.1	22.5	17.7	27.6	19.5	15.1	24.3
Ages 55-64	20.8	17.1	25.5	20.9	17.3	25.4	18.1	14.6	23.4
Ages 65-74	21.0	17.4	25.2	21.3	17.7	25.3	17.5	14.3	21.5
Ages 75+	14.9	12.4	17.3	15.2	12.6	17.5	12.3	9.3	14.8
Ages <65	21.8	17.8	26.7	22.0	17.9	26.8	19.0	15.2	24.1
Ages 65+	18.1	15.1	21.1	18.3	15.3	21.2	15.3	12.4	18.4
Stage ^e :									
All Stages	19.4	16.1	23.0	19.5	16.2	23.0	17.1	13.9	21.0
Localized	57.4	51.2	62.7	57.3	51.5	62.2	53.8	44.6	62.1
Regional	30.8	27.1	34.8	30.7	27.0	34.6	28.9	25.8	32.2
Distant	5.2	4.2	6.3	4.9	4.0	6.1	5.2	4.3	6.3
Unstaged/Unknown	8.2	7.5	9.0	7.4	6.5	8.3	9.5	8.3	10.8

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.13
Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	3.6	3.1	4.8	3.7	3.1	4.9	3.7	3.8	3.6
1978-1980 ^a	4.2	3.2	6.5	4.3	3.3	6.4	3.1	2.4	5.0
1981-1983 ^a	4.5	3.5	6.2	4.6	3.6	6.1	5.3	4.1	8.2
1984-1986 ^a	4.5	3.5	6.2	4.7	3.6	6.4	3.5	2.2	5.6
1987-1989 ^a	5.1	3.9	6.6	5.1	3.9	6.8	4.0	3.3	5.1
1990-1992 ^a	5.4	4.5	6.4	5.4	4.5	6.5	4.2	3.9	4.4
1993-1995 ^a	6.4	5.1	7.9	6.3	5.0	7.6	6.7	4.0	10.4
1996-1998 ^a	5.8	5.2	6.5	6.0	5.4	6.6	3.6	2.6	4.5
1999-2001 ^a	5.8	4.8	6.8	5.6	4.4	6.9	5.2	6.0	4.2
2002-2004 ^a	6.5	4.7	8.2	6.5	4.4	8.4	5.3	5.3	5.1
2005-2008 ^a	6.9	5.4	8.5	6.8	5.3	8.4	7.4	5.6	9.4
2009-2015 ^a	6.6 ^e	5.1 ^e	8.2 ^e	6.6 ^e	4.9 ^e	8.2 ^e	6.3 ^e	5.2 ^e	7.0
5-Year Period Survival (Percent) ^{bc}									
2015	6.5	4.9	8.1	6.5	4.8	8.0	7.2	5.8	8.6
Stage Distribution (%) 2009-2015 ^{bd}									
All Stages									
Number of cases	33,824	16,941	16,883	29,208	14,394	14,814	3,123	1,591	1,532
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	4	4	4	4	4	4	4	4	3
Regional	19	17	21	19	17	21	19	17	21
Distant	75	77	73	75	77	73	75	77	74
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	13.4	11.3	15.8	13.5	11.7	15.5	11.1	6.2 ^f	-
Ages 45-54	9.0	6.1	11.8	8.9	5.6	11.9	11.1	9.7	12.6
Ages 55-64	7.7	5.5	9.9	7.6	5.3	9.9	7.8	5.4	10.1
Ages 65-74	6.0	4.9	7.1	6.0	4.7	7.2	5.8	5.9	5.6
Ages 75+	3.6	2.5	4.5	3.6	2.4	4.7	3.6	3.3	3.8
Ages <65	8.2	5.8	10.6	8.1	5.5	10.6	8.9	6.8	11.0
Ages 65+	5.0	4.0	6.0	5.0	3.8	6.2	5.0	5.1	4.9
Stage ^d :									
All Stages	6.3	4.7	7.9	6.3	4.5	7.9	7.0	6.0	8.0
Localized	27.3	23.6	30.6	27.2	22.7	31.0	32.0 ^f	34.2 ^f	30.1 ^f
Regional	15.6	13.0	17.7	15.8	13.1	18.0	15.4	12.4	17.7
Distant	2.8	2.0	3.7	2.7	1.9	3.6	3.7	3.2	4.2
Unstaged/Unknown	9.5	5.4	13.1	9.1	3.1	14.0	4.6	8.5 ^f	-

Note: Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^b 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^c Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^d Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^e The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^f The standard error is between 5 and 10 percentage points.

^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.14
Non-Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	16.4	14.8	21.1	16.8	15.0	21.5	13.4	12.4	17.7
1978-1980 ^a	16.7	14.8	21.4	17.0	15.2	21.5	14.2	11.6	22.8
1981-1983 ^a	17.1	15.0	21.7	17.5	15.4	22.1	13.9	12.2	19.2
1984-1986 ^a	16.6	14.4	21.0	17.0	14.7	21.5	13.1	11.9	16.4
1987-1989 ^a	16.9	15.2	19.8	17.3	15.5	20.5	13.2	12.9	13.9
1990-1992 ^a	17.7	15.5	21.1	18.3	16.2	21.7	12.8	11.1	16.2
1993-1995 ^a	18.7	16.1	22.5	19.3	16.5	23.2	15.1	13.3	18.5
1996-1998 ^a	19.4	16.7	22.9	19.9	17.1	23.5	15.3	12.7	19.5
1999-2001 ^a	20.0	16.9	24.1	20.7	17.6	24.6	14.8	12.0	18.9
2002-2004 ^a	19.6	17.0	22.8	20.4	17.6	23.7	15.0	13.9	16.5
2005-2008 ^a	21.8	18.7	25.4	22.8	19.5	26.4	16.3	13.7	19.3
2009-2015 ^a	25.1 ^e	20.8 ^e	29.7 ^e	25.5 ^e	21.3 ^e	30.1 ^e	22.3 ^e	18.0 ^e	27.0 ^e
5-Year Period Survival (Percent) ^{bc}									
2015	24.6	20.3	29.3	25.1	20.7	29.7	20.3	16.3	25.1
Stage Distribution (%) 2009-2015 ^{bd}									
All Stages									
Number of cases	198,888	105,279	93,609	158,136	82,886	75,250	24,379	13,412	10,967
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	19	17	22	20	18	23	15	13	18
Regional	24	24	23	24	25	24	24	23	24
Distant	55	57	52	54	56	51	60	62	56
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015 ^b									
Age at Diagnosis:									
Ages <45	36.7	31.4	41.5	39.0	32.9	44.3	28.9	25.7	32.5
Ages 45-54	24.8	19.6	30.3	25.7	20.3	31.5	20.9	16.0	26.1
Ages 55-64	24.3	20.0	29.9	24.8	20.5	30.2	20.1	16.2	25.8
Ages 65-74	25.3	20.9	30.4	25.9	21.5	30.8	20.3	16.3	25.2
Ages 75+	19.9	16.2	23.4	20.3	16.7	23.8	15.9	11.7	19.8
Ages <65	25.1	20.4	30.7	25.7	21.0	31.4	20.8	16.6	26.2
Ages 65+	22.8	18.9	27.0	23.3	19.3	27.4	18.6	14.7	22.9
Stage ^d :									
All Stages	23.7	19.5	28.3	24.1	19.9	28.7	19.7	15.7	24.5
Localized	61.4	54.8	66.9	61.4	55.3	66.5	57.2	47.0	66.5
Regional	34.5	29.9	39.7	34.5	29.9	39.7	31.6	28.2	35.4
Distant	6.1	5.0	7.5	5.9	4.7	7.3	5.7	4.6	7.1
Unstaged/Unknown	14.6	13.8	15.4	13.8	12.8	14.9	11.3	10.3	12.5

Note: Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^b 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^c Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^d Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^e The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^f The standard error is between 5 and 10 percentage points.

^g The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 16.8
Melanoma of the Skin (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	60	51	68	-	-	-
1970-1973 ^a	-	-	-	68	62	75	-	-	-
1975-1977 ^b	81.9	77.5	86.3	82.1	77.8	86.3	56.7 ^g	-	-
1978-1980 ^b	82.8	77.7	87.7	82.9	77.9	87.9	59.8 ^h	-	-
1981-1983 ^b	82.8	78.4	87.3	82.8	78.4	87.2	61.9 ^g	-	-
1984-1986 ^b	86.6	82.6	91.0	86.4	82.3	91.0	72.3 ^h	-	-
1987-1989 ^b	88.1	84.9	91.5	88.0	84.9	91.3	78.6 ^g	-	89.5 ^g
1990-1992 ^b	89.3	87.0	91.8	89.3	87.1	91.8	59.6 ^g	-	-
1993-1995 ^b	89.7	87.3	92.6	89.6	87.1	92.6	69.5 ^g	66.6 ^g	-
1996-1998 ^b	91.0	89.5	92.7	90.9	89.4	92.7	73.9 ^g	68.0 ^h	78.6 ^g
1999-2001 ^b	92.2	90.2	94.6	92.2	90.2	94.6	73.9 ^g	70.9 ^g	76.1 ^g
2002-2004 ^b	93.2	91.1	95.4	93.2	91.1	95.6	72.0 ^g	-	70.4 ^g
2005-2008 ^b	93.3	91.7	95.2	93.4	91.8	95.3	72.6 ^g	62.7 ^g	78.7 ^g
2009-2015 ^b	94.2 ^f	92.5 ^f	96.4 ^f	94.1 ^f	92.3 ^f	96.3 ^f	69.8 ^g	63.0 ^g	74.8 ^g
5-Year Period Survival (Percent) ^{cd}									
2015	92.5	90.7	94.8	91.8	89.8	94.4	66.7	57.1	74.2
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	104,803	59,231	45,572	97,299	55,300	41,999	499	223	276
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	84	82	86	83	81	86	55	50	59
Regional	9	10	7	9	10	8	23	26	21
Distant	4	5	3	4	5	3	16	17	16
Unstaged/Unknown	4	4	4	3	3	4	5	7	4
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	94.7	91.5	96.9	94.5	91.1	96.8	82.5 ^g	68.8 ^h	89.2 ^g
Ages 45-54	93.3	90.7	96.0	92.9	90.1	95.9	66.3 ^g	60.5 ^g	72.2 ^g
Ages 55-64	92.4	90.6	95.2	91.9	90.1	94.8	65.7 ^g	52.9 ^g	78.9 ^g
Ages 65-74	93.0	91.8	95.0	92.4	91.2	94.7	70.3 ^g	62.3 ^h	73.3 ^g
Ages 75+	87.0	86.6	87.6	85.6	85.0	86.6	41.8 ^g	34.9 ^h	43.3 ^h
Ages <65	93.3	90.8	96.1	93.0	90.4	95.9	71.7	59.9 ^g	81.4
Ages 65+	90.4	89.7	91.5	89.4	88.6	90.8	57.5 ^g	52.4 ^h	59.3 ^g
Stage ^e :									
All Stages	92.2	90.4	94.6	91.6	89.6	94.2	66.8	58.5	73.0
Localized	98.7	98.2	99.4	98.3	97.6	99.1	87.8	87.3 ^g	87.5
Regional	64.7	62.1	69.3	65.0	62.4	69.6	49.2 ^g	41.5 ^g	56.7 ^g
Distant	24.8	23.4	27.7	24.7	23.7	26.9	27.5 ^g	-	40.1 ^g
Unstaged/Unknown	85.4	83.0	88.4	83.8	81.1	87.0	41.4 ^h	-	-

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 17.4
Mesothelioma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	9.7	3.0	26.7	10.4	3.3	27.4 ^f	-	-	-
1978-1980 ^b	6.0	5.5	8.1	5.9	5.2	8.7	-	-	-
1981-1983 ^b	7.7	5.3	15.1	8.1	5.4	16.2	-	-	-
1984-1986 ^b	6.6	4.3	13.9	6.1	3.7	14.1	-	-	-
1987-1989 ^b	6.2	4.6	12.2	6.3	4.8	12.1	4.8	-	-
1990-1992 ^b	7.7	4.2	20.6	7.4	4.1	20.1	10.2 ^f	8.5 ^f	-
1993-1995 ^b	6.5	3.2	18.7	5.9	2.8	18.0	9.0	8.0 ^f	-
1996-1998 ^b	9.8	8.2	15.2	9.8	8.0	16.2	11.4 ^f	-	-
1999-2001 ^b	7.6	5.3	15.9	6.7	5.0	13.0	-	-	-
2002-2004 ^b	6.6	4.9	11.6	6.1	4.5	10.9	7.9 ^f	-	-
2005-2008 ^b	9.4	7.0	17.0	10.1	7.2	19.7	4.3	-	-
2009-2015 ^b	10.6	7.6 ^e	19.7	10.0	7.3 ^e	18.5	16.8 ^f	0.0	-
5-Year Period Survival (Percent) ^{cd}									
2015	10.1	7.8	16.6	9.4	7.4	15.6	18.6	13.2	26.5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	46.6	35.2 ^f	58.8 ^f	44.5 ^f	35.0 ^f	56.7 ^f	-	-	-
Ages 45-54	21.1	14.1	32.4 ^f	19.5	13.6	30.5 ^f	26.0 ^f	-	-
Ages 55-64	15.2	14.2	17.8	14.5	13.6	16.9	19.2 ^f	15.4 ^f	-
Ages 65-74	9.4	7.8	15.6	9.5	8.0	15.4	10.1	8.6 ^f	-
Ages 75+	4.3	3.5	6.7	4.1	3.1	7.0	5.1	3.3	-
Ages <65	20.2	16.2	28.2	18.9	15.6	25.7	28.3 ^f	16.5 ^f	41.9 ^f
Ages 65+	6.5	5.3	10.2	6.4	5.2	10.3	7.6	6.0	10.4 ^f

- ^a Based on End Results data from a series of hospital registries and one population-based registry.
- ^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.
- ^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.
- ^d Based on follow-up of patients into 2016. Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).
- ^e The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).
- ^f The standard error is between 5 and 10 percentage points.
- ^g The standard error is greater than 10 percentage points.
- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 18.8
Myeloma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	12	13	10	-	-	-
1970-1973 ^a	-	-	-	19	20	17	-	-	-
1975-1977 ^b	24.6	23.9	25.3	24.1	23.6	24.7	29.3	28.9	29.5
1978-1980 ^b	25.9	24.4	27.5	24.8	24.1	25.5	32.5	27.4	37.5
1981-1983 ^b	27.5	25.7	29.4	27.2	25.4	28.9	28.9	29.6	27.9
1984-1986 ^b	27.3	27.7	26.8	26.0	25.8	26.2	31.8	33.3	30.3
1987-1989 ^b	27.2	28.8	25.6	26.8	29.1	24.5	30.0	29.3	30.6
1990-1992 ^b	29.3	30.6	27.9	28.4	29.7	26.9	34.2	38.0	30.6
1993-1995 ^b	31.7	32.3	31.0	30.5	31.4	29.5	35.4	34.9	35.7
1996-1998 ^b	32.5	34.5	30.4	32.3	34.4	29.9	31.6	32.9	30.6
1999-2001 ^b	34.6	37.0	31.9	34.5	37.0	31.5	34.4	37.2	32.0
2002-2004 ^b	42.6	43.6	41.4	43.4	44.8	41.6	40.7	40.8	40.7
2005-2008 ^b	47.5	47.8	47.1	47.1	48.3	45.4	49.5	45.8	52.7
2009-2015 ^b	53.7 ^f	54.4 ^f	52.9 ^f	53.2 ^f	54.1 ^f	52.0 ^f	55.1 ^f	54.8 ^f	55.4 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	53.0	52.5	53.6	51.8	51.3	52.4	55.0	54.6	55.4
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	34,220	18,885	15,335	24,646	14,089	10,557	6,936	3,364	3,572
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	5	5	4	5	6	5	4	4	3
Regional	0	0	0	0	0	0	0	0	0
Distant	95	95	96	95	94	95	96	96	97
Unstaged/Unknown	0	0	0	0	0	0	0	0	0
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	76.2	74.2	79.3	76.6	75.1	79.1	73.4	69.3	78.1
Ages 45-54	66.2	64.5	68.4	66.4	64.7	68.7	65.4	63.2	67.4
Ages 55-64	60.2	58.7	62.3	60.8	59.7	62.4	58.3	55.2	61.3
Ages 65-74	53.4	52.9	54.0	53.2	52.1	54.8	52.3	53.7	50.9
Ages 75+	32.9	33.1	32.8	32.2	32.5	31.8	34.1	32.9	34.8
Ages <65	63.6	62.0	65.8	63.9	62.6	65.8	62.2	59.3	65.1
Ages 65+	43.5	44.0	43.0	42.8	43.0	42.5	44.6	46.1	43.5
Stage ^e :									
All Stages	52.2	52.1	52.4	51.3	51.3	51.3	53.9	53.4	54.4
Localized	73.9	73.7	73.9	73.9	74.0	73.6	71.4	71.0 ^g	71.5 ^g
Regional	-	-	-	-	-	-	-	-	-
Distant	51.1	50.8	51.4	50.1	50.0	50.2	53.2	52.6	53.8
Unstaged/Unknown	-	-	-	-	-	-	-	-	-

^a Based on End Results data from a series of hospital registries and one population-based registry.^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.^d Based on follow-up of patients into 2016.

Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).^g The standard error is between 5 and 10 percentage points.^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 19.8
Non-Hodgkin Lymphoma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	31	31	31	-	-	-
1970-1973 ^a	-	-	-	41	39	43	-	-	-
1975-1977 ^b	46.5	45.6	47.5	46.8	46.3	47.3	48.6	42.6	55.3 ^g
1978-1980 ^b	47.9	46.1	49.8	47.9	46.2	49.5	51.1	46.9	56.7
1981-1983 ^b	50.6	50.3	50.9	50.8	50.5	51.1	49.5	49.2	49.8
1984-1986 ^b	51.6	50.1	53.4	52.1	50.7	53.7	46.8	44.5	49.9
1987-1989 ^b	50.9	47.6	54.9	51.3	48.2	55.2	45.7	41.3	51.0
1990-1992 ^b	50.7	46.7	55.7	51.5	47.6	56.4	42.2	38.4	47.6
1993-1995 ^b	52.6	48.7	57.5	53.3	49.8	57.7	42.5	35.9	54.9
1996-1998 ^b	58.8	57.0	61.0	59.5	57.7	61.5	54.7	53.1	57.2
1999-2001 ^b	64.0	61.4	67.0	65.0	62.8	67.6	55.8	49.0	63.8
2002-2004 ^b	69.8	68.6	71.2	71.0	70.1	72.1	63.6	61.1	66.6
2005-2008 ^b	71.6	70.6	72.7	72.8	71.9	73.8	62.5	57.8	67.5
2009-2015 ^b	74.7 ^f	73.9 ^f	75.7 ^f	75.7 ^f	74.8 ^f	76.7 ^f	69.5 ^f	67.0 ^f	72.4 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	72.2	70.5	74.3	72.6	70.8	74.7	67.1	64.1	70.3
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	97,737	53,606	44,131	80,120	44,109	36,011	8,184	4,388	3,796
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	27	27	29	27	26	28	28	25	31
Regional	15	15	15	15	15	15	15	15	15
Distant	50	51	48	51	52	49	51	54	48
Unstaged/Unknown	8	7	8	7	7	8	6	6	7
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	84.0	82.0	87.0	85.5	83.6	88.5	73.5	70.8	77.6
Ages 45-54	81.0	77.7	85.9	82.6	79.5	87.2	68.7	63.9	75.0
Ages 55-64	77.0	74.2	80.9	78.1	75.4	81.8	67.8	62.0	74.9
Ages 65-74	72.5	70.6	74.7	73.1	71.1	75.5	65.6	62.3	68.2
Ages 75+	55.4	53.9	56.8	55.7	53.8	57.4	48.2	44.9	50.0
Ages <65	80.0	77.3	83.8	81.2	78.7	84.9	70.1	65.9	75.9
Ages 65+	63.8	62.7	64.9	64.1	62.8	65.5	58.4	56.2	59.8
Stage ^e :									
All Stages	72.0	70.7	73.7	72.4	71.1	74.0	66.5	63.7	69.8
Localized	84.0	83.0	85.0	84.3	83.3	85.2	81.0	76.6	85.0
Regional	75.0	75.1	74.9	75.5	75.6	75.5	68.9	69.8	67.8
Distant	64.8	63.3	66.8	65.7	64.2	67.7	58.0	55.7	61.0
Unstaged/Unknown	70.3	68.6	72.3	67.9	66.2	69.8	65.9	64.8	66.6

^a Based on End Results data from a series of hospital registries and one population-based registry.^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).^g The standard error is between 5 and 10 percentage points.^h The standard error is greater than 10 percentage points.⁻ Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 20.10
Cancer of the Oral Cavity and Pharynx (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	45	-	-	-	-	-
1970-1973 ^a	-	-	-	43	-	-	-	-	-
1975-1977 ^b	52.5	51.6	54.8	54.1	53.8	54.7	36.0	29.7	49.0
1978-1980 ^b	53.3	51.8	56.5	55.4	54.5	57.4	34.9	29.8	45.8
1981-1983 ^b	51.7	50.1	55.1	54.0	52.8	56.5	30.9	25.4	45.6
1984-1986 ^b	54.1	51.7	59.0	56.3	54.8	59.4	35.0	29.5	49.1
1987-1989 ^b	53.6	51.0	58.8	56.0	54.1	59.8	34.0	30.0	44.0
1990-1992 ^b	55.4	53.2	60.1	57.9	56.4	61.0	33.1	28.4	46.0
1993-1995 ^b	57.7	56.2	60.6	60.1	59.4	61.3	38.0	33.1	50.5
1996-1998 ^b	57.8	56.2	61.0	59.9	59.1	61.4	36.4	31.3	49.5
1999-2001 ^b	60.3	59.2	62.5	62.2	62.0	62.7	44.6	39.6	57.1
2002-2004 ^b	63.9	63.1	65.7	65.7	65.7	65.7	48.2	42.8	58.8
2005-2008 ^b	65.5	65.1	66.5	67.4	67.2	67.9	43.0	40.7	48.0
2009-2015 ^b	68.4 ^f	67.6 ^f	70.4 ^f	70.3 ^f	69.9 ^f	71.4 ^f	50.9 ^f	49.2 ^f	54.4
5-Year Period Survival (Percent) ^{cd}									
2015	65.8	65.2	67.4	67.2	66.8	68.2	49.3	48.3	51.5
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	57,854	41,585	16,269	47,354	34,485	12,869	5,169	3,580	1,589
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	29	24	41	30	25	43	19	14	29
Regional	47	51	37	48	52	38	48	51	40
Distant	20	21	16	18	20	15	30	32	27
Unstaged/Unknown	4	4	5	4	4	5	3	3	4
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	79.8	77.3	83.9	81.1	78.8	84.9	70.9	67.1	75.7
Ages 45-54	70.2	69.7	71.8	72.8	72.5	74.0	50.0	49.3	52.0
Ages 55-64	66.6	65.6	70.3	68.6	67.5	72.6	46.5	45.9	48.3
Ages 65-74	62.4	60.8	66.5	63.9	62.6	67.3	43.1	40.0	49.8
Ages 75+	51.2	51.1	52.5	52.1	52.5	51.2	32.7	30.1	35.0
Ages <65	69.7	68.4	73.8	71.6	70.4	75.5	51.4	49.7	55.7
Ages 65+	57.9	57.5	58.6	59.0	59.0	58.9	40.1	37.8	43.5
Stage ^e :									
All Stages	65.3	64.6	67.1	66.7	66.4	67.7	48.4	46.7	52.0
Localized	84.4	83.2	86.3	84.5	83.6	85.8	78.1	73.8	82.7
Regional	66.0	67.2	61.7	67.4	68.8	62.1	49.6	50.0	48.2
Distant	39.1	39.9	36.6	40.2	41.2	36.5	28.3	29.0	26.5
Unstaged/Unknown	50.9	51.1	50.3	48.3	48.7	47.5	40.2	45.3 ^g	32.2 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 21.8
Cancer of the Ovary(Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	32	-	-	32	-	-
1970-1973 ^a	-	-	-	36	-	-	32	-	-
1975-1977 ^b	35.9	44.1	21.4	35.3	43.5	21.1	41.6	48.6	24.9 ^g
1978-1980 ^b	37.7	47.3	22.1	36.9	46.5	22.3	38.8	49.2	12.8
1981-1983 ^b	38.9	50.3	23.1	38.5	50.2	23.1	37.9	46.0	22.6
1984-1986 ^b	38.4	49.4	24.1	37.5	48.5	23.8	39.2	51.9	21.2
1987-1989 ^b	38.2	51.1	23.6	38.2	51.3	23.9	33.9	47.2	17.1
1990-1992 ^b	40.6	55.5	24.1	40.4	56.1	24.1	35.7	49.4	16.8
1993-1995 ^b	41.6	55.9	26.5	40.7	55.5	26.0	41.3	54.8	26.4
1996-1998 ^b	43.9	57.1	28.4	43.3	56.6	28.5	39.2	53.3	20.4
1999-2001 ^b	43.9	56.0	29.0	43.7	56.6	28.9	35.5	43.9	21.9
2002-2004 ^b	43.8	57.0	27.0	43.3	56.8	27.2	36.7	46.5	20.8
2005-2008 ^b	45.3	58.8	27.3	44.9	58.8	27.7	38.2	46.6	24.0
2009-2015 ^b	48.4 ^f	60.7 ^f	31.5 ^f	48.1 ^f	61.1 ^f	31.9 ^f	40.3	50.1	22.6
5-Year Period Survival (Percent) ^{cd}									
2015	47.8	59.5	31.8	47.7	60.3	32.2	38.6	48.4	20.6
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	34,359	19,644	14,715	27,885	15,319	12,566	3,060	1,881	1,179
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	15	20	7	14	20	7	15	19	7
Regional	21	25	15	20	25	15	16	19	12
Distant	59	51	69	60	52	69	62	57	71
Unstaged/Unknown	6	3	9	6	3	8	7	5	9
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	76.0	-	-	76.9	-	-	70.3	-	-
Ages 45-54	59.7	-	-	60.7	-	-	47.3	-	-
Ages 55-64	51.1	-	-	52.2	-	-	38.7	-	-
Ages 65-74	39.7	-	-	40.6	-	-	26.2	-	-
Ages 75+	22.0	-	-	22.5	-	-	13.4	-	-
Ages <65	59.7	-	-	60.3	-	-	49.7	-	-
Ages 65+	30.9	-	-	31.5	-	-	20.5	-	-
Stage ^e :									
All Stages	47.6	59.7	30.9	47.6	60.3	31.5	38.8	49.7	20.5
Localized	92.4	93.9	86.5	93.2	94.8	87.4	86.2	89.1	72.2 ^g
Regional	75.2	81.7	60.4	75.7	82.7	61.0	64.9	72.0	46.3 ^g
Distant	29.2	36.7	21.5	29.6	37.6	22.0	22.0	28.5	12.9
Unstaged/Unknown	24.3	53.3	9.1	22.3	51.5	9.2	29.0	58.8 ^g	5.4

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

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 22.8
Cancer of the Pancreas (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	1	1	2	1	0	3
1970-1973 ^a	-	-	-	2	2	2	2	0	3
1975-1977 ^b	2.5	2.6	2.2	2.5	2.7	2.3	2.3	2.5	1.9
1978-1980 ^b	2.9	2.7	3.0	2.5	2.6	2.5	5.7	4.5	7.0
1981-1983 ^b	2.7	2.4	3.1	2.5	2.1	3.0	3.6	3.7	3.2
1984-1986 ^b	2.9	2.3	3.5	2.6	2.1	3.1	4.7	3.9	5.3
1987-1989 ^b	3.5	3.3	3.7	3.2	3.0	3.3	5.5	5.1	5.8
1990-1992 ^b	4.3	4.1	4.5	4.4	4.2	4.5	3.6	3.2	4.0
1993-1995 ^b	4.0	3.7	4.3	3.9	3.6	4.2	3.7	3.6	3.7
1996-1998 ^b	4.4	4.6	4.1	4.1	4.7	3.6	3.4	3.1	3.5
1999-2001 ^b	5.1	5.2	5.0	5.0	5.5	4.5	5.6	3.7	7.4
2002-2004 ^b	5.6	5.3	5.9	5.7	5.6	5.7	4.5	3.0	5.7
2005-2008 ^b	7.4	7.3	7.5	7.5	7.2	7.7	6.3	6.9	5.8
2009-2015 ^b	9.8 ^f	10.3 ^f	9.2 ^f	9.8 ^f	10.4 ^f	9.2 ^f	8.9 ^f	8.7 ^f	9.1 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	10.1	10.2	10.0	10.0	10.2	9.7	10.2	9.3	11.0
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	63,444	32,169	31,275	49,999	25,795	24,204	7,863	3,647	4,216
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	10	10	11	10	9	11	10	9	11
Regional	29	29	30	30	30	30	27	26	28
Distant	53	55	50	52	54	50	56	60	53
Unstaged/Unknown	8	7	9	8	7	9	7	6	7
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	36.3	29.1	44.0	36.3	30.3	43.2	34.8	17.9	47.1
Ages 45-54	15.6	13.6	18.6	15.6	13.5	18.7	14.7	12.8	17.1
Ages 55-64	10.5	9.9	11.2	10.6	10.2	11.1	8.4	7.4	9.6
Ages 65-74	8.7	9.1	8.2	8.8	9.2	8.4	7.2	6.4	7.8
Ages 75+	4.5	5.0	4.2	4.6	5.3	4.2	3.7	2.2	4.3
Ages <65	14.0	12.3	16.2	13.8	12.5	15.8	12.5	9.8	15.8
Ages 65+	6.4	7.2	5.8	6.5	7.3	5.8	5.6	4.9	5.9
Stage ^e :									
All Stages	9.3	9.4	9.2	9.2	9.5	9.0	9.0	7.7	10.1
Localized	37.4	39.6	35.5	36.9	39.5	34.5	34.5	31.4	36.3
Regional	12.4	13.2	11.6	12.5	13.2	11.7	12.2	12.1	12.2
Distant	2.9	2.9	3.0	3.0	3.0	2.9	2.8	2.3	3.3
Unstaged/Unknown	5.6	6.4	5.0	4.9	5.8	4.0	10.2	10.0	10.2

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant (p<.05).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 23.8
Cancer of the Prostate (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Males			White Males			Black Males		
	All	<65	65+	All	<65	65+	All	<65	65+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	50	-	-	35	-	-
1970-1973 ^a	-	-	-	63	-	-	55	-	-
1975-1977 ^b	67.8	73.4	66.1	68.5	75.2	66.6	60.7	62.0	60.1
1978-1980 ^b	70.1	75.2	68.6	71.2	76.7	69.6	62.1	65.0	60.6
1981-1983 ^b	72.0	76.0	70.9	73.1	77.6	71.9	62.8	65.0	61.9
1984-1986 ^b	75.2	77.4	74.6	76.4	79.1	75.7	65.6	67.2	64.9
1987-1989 ^b	82.8	83.2	82.7	84.4	84.7	84.3	71.1	72.8	70.6
1990-1992 ^b	92.9	93.0	92.9	94.1	94.0	94.1	84.5	86.8	83.6
1993-1995 ^b	95.2	95.9	94.9	96.0	96.6	95.7	91.8	93.4	90.9
1996-1998 ^b	97.4	98.5	96.7	97.9	99.0	97.4	95.0	96.7	93.7
1999-2001 ^b	99.3	99.1	99.3	99.7	99.5	99.6	97.4	98.0	96.4
2002-2004 ^b	99.7	99.5	99.7	99.8	99.6	99.7	97.9	99.2	96.3
2005-2008 ^b	99.5	99.5	99.5	99.8	99.9	99.6	98.2	98.4	97.9
2009-2015 ^b	98.6 ^f	99.2 ^f	98.1 ^f	99.0 ^f	99.6 ^f	98.6 ^f	96.5 ^f	97.9 ^f	94.5 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	97.5	98.1	97.0	97.5	98.2	96.9	95.1	96.9	92.7
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	337,761	150,486	187,275	254,409	109,319	145,090	53,318	29,733	23,585
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	77	78	77	77	78	77	79	79	79
Regional	13	16	10	14	17	11	11	14	7
Distant	6	4	7	6	4	7	7	5	8
Unstaged/Unknown	4	3	6	3	2	5	3	2	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	95.7	-	-	94.4	-	-	97.4	-	-
Ages 45-54	97.5	-	-	97.3	-	-	97.8	-	-
Ages 55-64	98.7	-	-	98.9	-	-	97.1	-	-
Ages 65-74	100.0	-	-	100.0	-	-	96.8	-	-
Ages 75+	91.6	-	-	91.3	-	-	83.6	-	-
Ages <65	98.4	-	-	98.5	-	-	97.3	-	-
Ages 65+	97.7	-	-	97.8	-	-	93.5	-	-
Stage ^e :									
All Stages	98.0	98.4	97.7	98.1	98.5	97.8	95.7	97.3	93.5
Localized	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Regional	100.0	99.6	100.0	100.0	99.5	100.0	100.0	100.0	99.1
Distant	30.5	34.0	29.0	29.9	33.4	28.5	29.5	33.4	26.5
Unstaged/Unknown	81.6	91.1	78.2	74.5	88.0	70.4	70.2	84.8	62.5

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 24.8
Cancer of the Stomach (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	11	10	13	8	5	14
1970-1973 ^a	-	-	-	13	12	14	13	15	10
1975-1977 ^b	15.2	14.4	16.5	14.1	13.1	15.8	16.1	16.1	16.1
1978-1980 ^b	16.1	14.3	18.9	15.4	13.6	18.2	16.4	15.6	18.0
1981-1983 ^b	17.3	16.4	18.7	16.2	15.4	17.5	16.5	16.2	17.1
1984-1986 ^b	17.6	15.6	20.9	16.8	14.3	20.9	19.1	16.9	22.1
1987-1989 ^b	19.7	17.0	24.3	18.3	15.5	23.1	18.8	16.6	22.5
1990-1992 ^b	20.9	18.1	25.4	18.8	16.1	23.2	22.7	22.0	23.7
1993-1995 ^b	21.0	20.1	22.6	20.0	18.9	21.9	19.3	17.5	21.9
1996-1998 ^b	22.3	21.1	24.3	20.4	18.7	23.3	22.6	20.4	25.3
1999-2001 ^b	24.1	23.4	25.2	22.3	21.1	24.4	23.1	24.9	20.6
2002-2004 ^b	27.5	25.2	31.1	26.1	24.1	29.5	29.2	24.8	34.5
2005-2008 ^b	29.6	27.7	32.6	28.7	27.5	30.9	28.6	22.4	37.5
2009-2015 ^b	32.1 ^f	29.9 ^f	35.7 ^f	31.2 ^f	29.0 ^f	35.0 ^f	32.7 ^f	27.0 ^f	39.5 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	31.8	28.7	36.5	30.5	27.3	35.9	33.0	27.9	39.3
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	37,318	22,651	14,667	26,032	16,351	9,681	5,140	2,857	2,283
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	28	25	33	27	24	33	29	25	34
Regional	26	28	23	26	28	22	25	26	24
Distant	36	38	33	37	39	34	36	40	31
Unstaged/Unknown	10	9	12	10	8	12	9	8	11
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	34.0	30.0	38.3	33.0	28.5	38.4	35.7	32.2	38.8
Ages 45-54	35.4	31.7	41.6	33.8	30.4	40.1	37.7	30.3	48.5
Ages 55-64	34.7	30.7	42.8	33.3	29.7	41.8	35.4	28.1	47.3
Ages 65-74	34.5	30.7	41.6	32.6	29.3	39.4	32.8	25.2	43.8
Ages 75+	23.9	22.6	25.1	22.9	21.1	24.9	22.4	19.6	24.4
Ages <65	34.8	30.9	41.4	33.4	29.7	40.5	36.2	29.4	46.2
Ages 65+	28.8	26.8	31.6	27.4	25.4	30.6	27.6	22.9	32.4
Stage ^e :									
All Stages	31.5	28.7	35.7	30.1	27.4	34.7	32.0	26.5	38.9
Localized	68.8	64.8	73.4	67.6	64.3	71.6	66.4	56.2	75.8
Regional	31.0	30.8	31.5	28.9	28.6	29.6	33.4	33.0	33.8
Distant	5.3	5.4	5.0	5.2	5.5	4.4	6.2	5.1	7.8
Unstaged/Unknown	23.0	20.1	26.4	23.0	18.8	28.2	21.5	14.9	27.0

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 25.8
Cancer of the Testis (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Diagnosis Year, Stage and Age

	All Races, Males			White Males			Black Males		
	All	<50	50+	All	<50	50+	All	<50	50+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	63	-	-	-	-	-
1970-1973 ^a	-	-	-	72	-	-	-	-	-
1975-1977 ^b	82.6	83.3	77.6	82.6	83.3	77.3	-	-	-
1978-1980 ^b	88.8	89.5	82.2	89.2	89.8	83.1	73.1 ^g	78.0 ^g	-
1981-1983 ^b	92.0	92.5	85.5	92.2	92.8	86.2	87.7 ^g	84.7 ^g	-
1984-1986 ^b	92.6	93.6	80.4	92.9	94.0	80.6	87.0 ^g	89.4 ^g	-
1987-1989 ^b	95.2	95.0	95.7	95.5	95.4	95.3	88.0 ^g	87.4 ^g	-
1990-1992 ^b	95.8	95.8	93.7	96.2	96.1	94.6	84.2 ^g	89.0 ^g	-
1993-1995 ^b	95.8	96.4	86.7	96.1	96.6	87.8	88.0	89.4	-
1996-1998 ^b	95.6	96.3	86.6	95.8	96.5	86.6	89.0	90.3	-
1999-2001 ^b	96.2	96.4	91.9	96.5	96.7	92.8	87.6	89.0	-
2002-2004 ^b	96.0	96.5	89.8	96.5	97.0	90.9	85.1	84.8 ^g	-
2005-2008 ^b	96.9	97.0	95.4	97.4	97.5	96.1	89.8	88.7	-
2009-2015 ^b	96.8 ^f	97.0 ^f	94.8 ^f	97.0 ^f	97.3 ^f	95.1 ^f	92.7	92.7	91.9 ^g
5-Year Period Survival (Percent) ^{cd}									
2015	94.8	95.5	90.0	94.9	95.7	89.9	91.7	91.9	88.9
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	16,433	14,472	1,961	14,594	12,829	1,765	520	440	80
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	68	68	65	68	68	65	62	60	70
Regional	19	19	19	19	19	19	21	22	14
Distant	12	12	13	12	12	13	15	15	11
Unstaged/Unknown	1	1	3	1	1	2	3	2	5
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	95.6	-	-	95.7	-	-	92.0	-	-
Ages 45-54	95.4	-	-	95.6	-	-	89.2	-	-
Ages 55-64	91.0	-	-	90.6	-	-	97.0	-	-
Ages 65-74	86.2	-	-	86.0	-	-	-	-	-
Ages 75+	80.8 ^g	-	-	83.2 ^g	-	-	-	-	-
Ages <65	95.4	-	-	95.5	-	-	92.3	-	-
Ages 65+	85.0	-	-	85.6	-	-	-	-	-
Stage ^e :									
All Stages	95.2	95.7	91.5	95.3	95.8	91.6	91.8	92.4	88.2
Localized	99.2	99.2	99.0	99.2	99.2	99.0	98.6	98.4	97.1
Regional	96.4	96.8	93.1	96.6	96.9	93.7	89.3	89.9	-
Distant	72.8	75.1	57.1	73.6	75.9	58.3	68.2 ^g	71.2 ^g	-
Unstaged/Unknown	79.5	88.0	49.2 ^g	77.8	86.6	49.6 ^g	-	-	-

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 26.8
Cancer of the Thyroid (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	83	75	87	-	-	-
1970-1973 ^a	-	-	-	86	82	87	-	-	-
1975-1977 ^b	92.1	91.1	92.5	91.8	90.7	92.2	89.8	-	91.0
1978-1980 ^b	92.1	87.2	93.6	91.5	87.5	92.7	90.2	68.0 ^h	95.5
1981-1983 ^b	93.6	92.2	93.9	93.1	90.9	93.7	96.4	100.0	93.2
1984-1986 ^b	93.2	89.9	94.3	93.2	89.4	94.4	89.5	86.1 ^g	90.3
1987-1989 ^b	94.4	91.6	95.2	94.1	91.6	95.0	92.3	91.2 ^g	92.3
1990-1992 ^b	94.3	90.5	95.6	94.9	91.6	96.0	85.9	84.5 ^g	86.3
1993-1995 ^b	95.4	91.6	96.7	95.6	91.5	96.9	93.2	87.4 ^g	94.3
1996-1998 ^b	95.6	91.0	96.9	95.9	91.3	97.3	95.1	86.5 ^g	96.5
1999-2001 ^b	96.5	94.3	97.1	96.8	94.9	97.4	92.1	88.4 ^g	92.4
2002-2004 ^b	97.3	93.9	98.2	97.4	94.1	98.3	95.9	94.0	96.0
2005-2008 ^b	98.0	96.0	98.5	98.2	96.2	98.7	96.6	91.5	97.3
2009-2015 ^b	98.5 ^f	96.3 ^f	99.0 ^f	98.8 ^f	96.9 ^f	99.2 ^f	96.9	92.3	97.6 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	98.1	95.6	98.9	98.4	96.0	99.0	96.6	92.4	97.4
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	76,946	17,814	59,132	61,428	14,699	46,729	5,437	956	4,481
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	67	58	70	67	58	70	80	72	81
Regional	27	34	26	28	34	26	14	18	13
Distant	4	6	3	4	6	3	5	8	4
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	99.7	99.1	99.8	99.7	99.3	99.8	99.2	96.8	99.6
Ages 45-54	99.0	96.7	99.5	98.9	96.8	99.5	99.1	97.2	99.4
Ages 55-64	98.0	95.1	99.0	98.2	95.0	99.3	95.5	93.2	95.8
Ages 65-74	96.7	92.6	97.6	97.0	93.4	97.8	94.2	81.8 ^g	96.9
Ages 75+	87.0	83.9	87.9	89.4	86.9	89.6	76.0	71.4 ^g	74.9
Ages <65	99.1	97.2	99.6	99.1	97.2	99.6	98.5	96.2	98.8
Ages 65+	93.9	90.1	94.7	94.7	91.5	95.3	89.1	80.4 ^g	90.8
Stage ^e :									
All Stages	98.2	95.7	98.9	98.4	96.1	99.0	97.2	93.3	97.8
Localized	99.9	99.8	100.0	99.9	99.9	100.0	99.9	99.3	100.0
Regional	98.2	96.1	99.0	98.3	96.4	99.1	93.9	86.3	96.0
Distant	56.2	52.0	59.0	56.8	52.1	60.1	48.7	46.3 ^g	49.7
Unstaged/Unknown	89.1	82.5	91.3	89.0	85.1	90.4	84.3	-	86.4

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 27.8
Cancer of the Urinary Bladder (Invasive and *In Situ*)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	53	53	53	24	24	24
1970-1973 ^a	-	-	-	61	61	60	36	38	27
1975-1977 ^b	72.3	73.7	68.3	73.3	74.3	70.3	50.3	56.5	38.1 ^g
1978-1980 ^b	73.9	75.1	70.4	74.7	75.4	72.3	54.5	62.6	40.1
1981-1983 ^b	76.7	78.1	72.8	77.4	78.6	74.0	59.5	64.9	47.0 ^g
1984-1986 ^b	76.7	78.1	72.7	77.2	78.4	73.6	59.4	62.3	52.8
1987-1989 ^b	79.0	81.3	71.9	79.8	82.0	73.1	62.6	67.5	52.9
1990-1992 ^b	79.2	81.7	71.9	80.2	82.6	73.1	63.3	66.0	58.5
1993-1995 ^b	80.2	82.1	75.0	81.1	82.5	76.9	60.8	68.1	46.2
1996-1998 ^b	79.1	80.4	75.4	79.8	81.1	76.0	62.9	65.9	56.0
1999-2001 ^b	80.0	80.9	77.2	81.0	81.5	79.4	67.7	72.1	60.1
2002-2004 ^b	79.9	81.7	74.7	80.8	82.3	76.3	61.4	66.7	52.1
2005-2008 ^b	79.4	80.9	74.6	80.2	81.5	75.9	65.0	69.6	55.9
2009-2015 ^b	78.3 ^f	79.1 ^f	75.6 ^f	79.1 ^f	79.7 ^f	77.0 ^f	64.9 ^f	68.7 ^f	57.6 ^f
5-Year Period Survival (Percent) ^{cd}									
2015	77.0	78.2	73.3	77.5	78.4	74.4	63.5	67.1	56.9
Stage Distribution (%) 2009-2015 ^{ce}									
All Stages									
Number of cases	90,571	68,619	21,952	79,585	60,831	18,754	5,209	3,448	1,761
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
In Situ	51	52	50	52	52	51	40	44	34
Localized	34	34	33	34	35	32	37	36	38
Regional	7	7	8	7	7	8	10	9	13
Distant	5	4	6	4	4	6	9	7	11
Unstaged/Unknown	3	3	3	3	2	3	4	4	4
5-Year Relative Survival (Percent), 2009-2015 ^c									
Age at Diagnosis:									
Ages <45	87.4	88.7	84.0	88.2	89.1	85.9	72.2	76.2	61.7 ^g
Ages 45-54	83.6	84.0	82.2	84.6	84.8	83.9	69.2	72.1	62.1
Ages 55-64	81.5	81.7	80.8	82.1	82.0	82.4	68.5	70.9	61.7
Ages 65-74	80.3	81.0	77.9	80.6	81.3	78.2	67.1	69.6	61.6
Ages 75+	69.4	71.4	64.0	69.9	71.6	65.3	54.2	60.5	46.5
Ages <65	82.5	82.8	81.4	83.1	83.2	83.1	69.1	71.7	62.0
Ages 65+	74.4	76.0	69.6	74.8	76.2	70.5	60.6	65.5	52.7
Stage ^e :									
All Stages	77.1	78.3	73.2	77.5	78.5	74.3	64.3	68.5	56.0
In Situ	95.8	95.4	97.2	95.8	95.3	97.3	92.2	92.1	92.3
Localized	69.5	71.8	62.0	69.7	71.8	62.5	60.6	66.0	50.6
Regional	36.3	37.2	34.0	37.2	38.3	34.0	28.8	25.0	33.0
Distant	4.6	5.0	3.9	4.6	4.7	4.3	2.6	3.8	1.1
Unstaged/Unknown	47.3	51.9	35.9	45.4	49.4	34.9	40.2	49.1 ^g	21.2 ^g

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

Based on follow-up of patients into 2016.

^d Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^f The difference between 1975-1977 and 2009-2015 is statistically significant ($p < .05$).

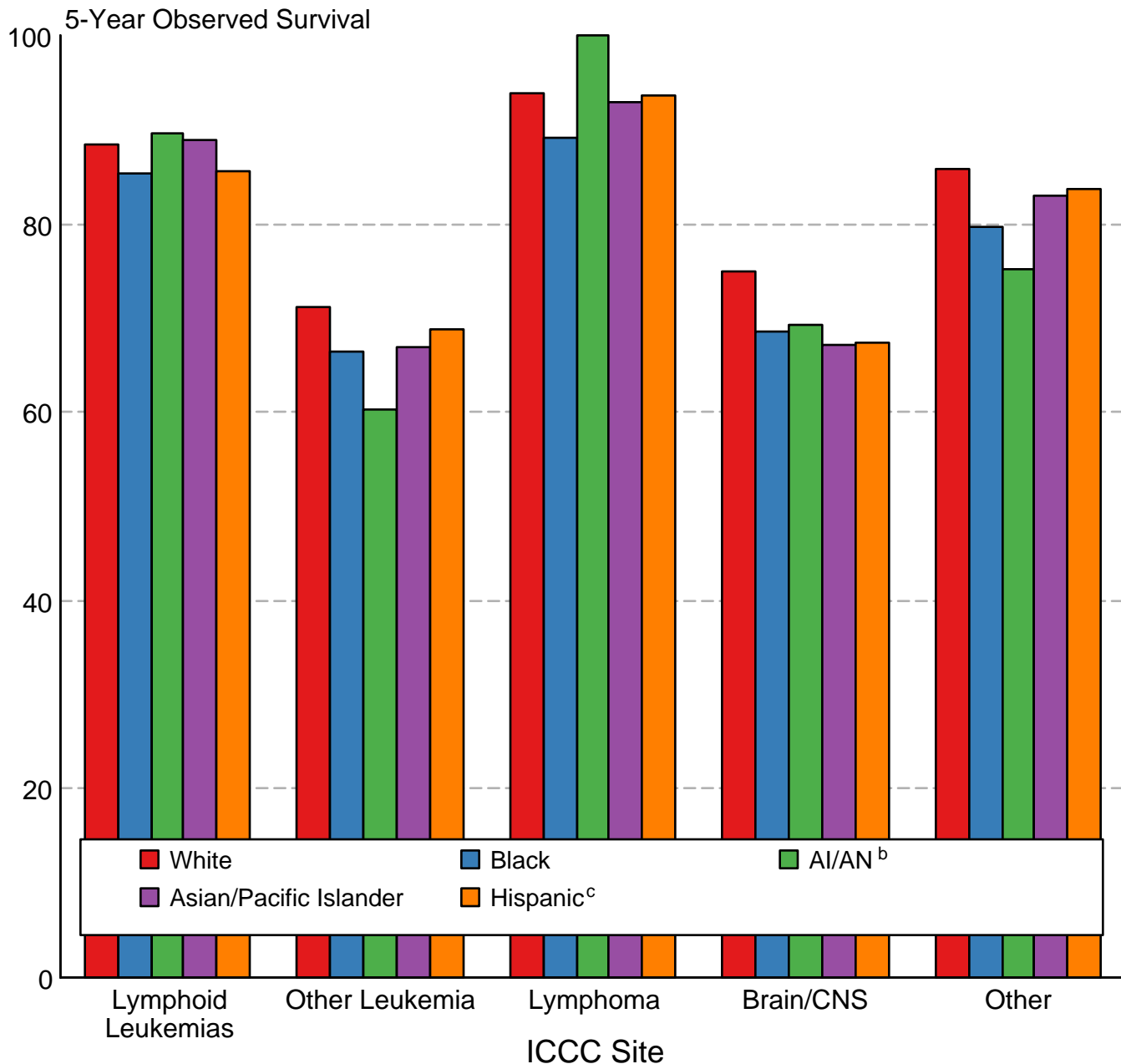
^g The standard error is between 5 and 10 percentage points.

^h The standard error is greater than 10 percentage points.

- Statistic could not be calculated due to fewer than 25 cases during the time period.

Figure 29.3

Childhood Cancer 5-Year Observed Survival (%) by ICCC Group^a and Race/Ethnicity Both Sexes, Under 20 Years of Age, 2009-2015



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).

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.

^a Excludes myelodysplastic syndromes (MDS) and benign brain tumors.

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

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Survival data for Hispanics are based on NHIA and excludes cases from the Alaska Native Registry.