

# Cancer

## Section 6



## Section 6: Cancer

### Cancer Key Points

**120,431**

Primary cancers diagnosed  
in Florida in 2016



Cancer rate per 100,000  
population increased from  
408 to 435 from 1981 to  
2016



60% of newly diagnosed  
cancers in 2016 in Florida  
were in adults  $\geq 65$  years old

### Background

The term cancer covers many diseases that share the common feature of abnormal cell growth. It can occur in almost any part of the body. Early detection through routine health and cancer screenings and timely quality treatment and care may improve prognosis and survival. Each type of cancer develops differently and has different risk factors. For example, the main risk factor for lung cancer is cigarette smoking, but for skin cancer it is sun exposure. The causes of some common cancers, such as breast cancer, remain unknown; however, age is the number one risk factor for all cancer types.

### Reporting and Surveillance

Section 385.202, Florida Statutes requires all hospitals and outpatient facilities licensed in Florida to report to the Department each patient diagnosed or treated for cancer. Information to be reported on each patient includes routine personal and demographic data, diagnosis, stage of disease at diagnosis, medical history, laboratory data, tissue diagnosis and initial course of treatment. Cancer incidence data are collected, verified and maintained by the Florida Cancer Data System (FCDS), Florida's statewide cancer registry. The FCDS is administered by the Department of Health's Public Health Research Section and operated by the Sylvester Comprehensive Cancer Center at the University of Miami Leonard M. Miller School of Medicine. The FCDS is used by the state and its partners to monitor the occurrence of cancer incidence, aid in research studies to reduce cancer morbidity and mortality, focus cancer control activities and address public questions and concerns regarding cancer.

The FCDS began operations with a pilot project for cancer registration in 1980 and commenced statewide collection of cancer incidence data (i.e., new cancer cases) from all Florida hospitals in 1981. The FCDS now collects incidence data from hospitals, freestanding ambulatory surgical centers, radiation therapy facilities, pathology laboratories and private physician offices. Each facility, laboratory and practitioner is required to report to the FCDS within six months of each diagnosis and within six months of the date of each treatment. Consequently, there is an inherent time lag of one to two years in the release of cancer registry data for surveillance activities and publications. At the time this report was published, the most recent FCDS data available were from 2016.

For more information about the burden of cancer in Florida, see the Florida Annual Cancer Report, an epidemiological series available on the FCDS website at <https://fcds.med.miami.edu/inc/publications.shtml>.

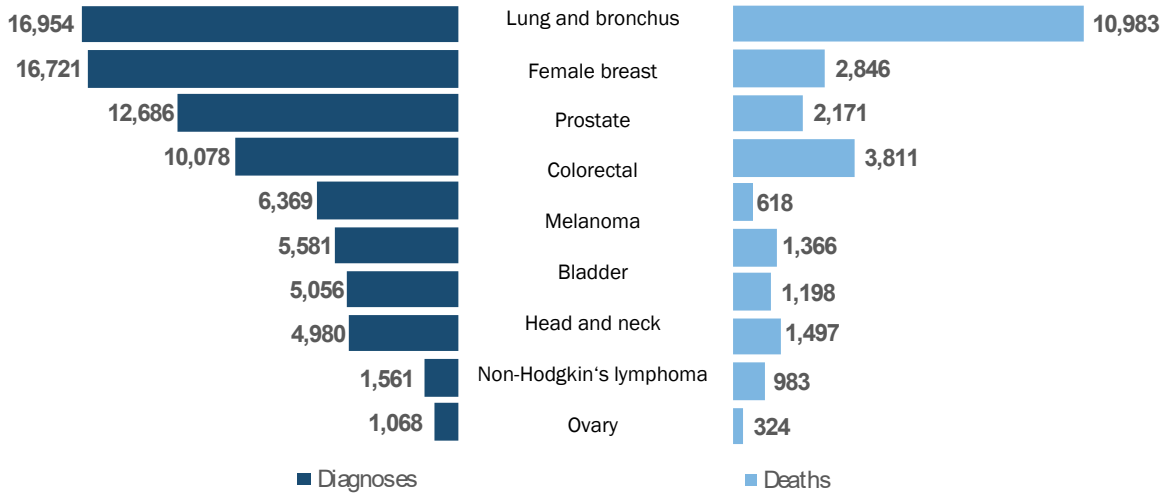
### General Trends for 2016

During 2016, physicians diagnosed 120,431 primary cancers (i.e., the site or organ where the cancer starts) among Floridians, an average of 330 new diagnoses per day. The overall rate of occurrence for all cancers combined in the state has increased from 407.8 new diagnoses per 100,000 in 1981 to 434.8 new diagnoses per 100,000 in 2016. However, this has not been a steady increase as cancer patterns vary year to year. Cancer occurs predominantly among older people as age is the top risk factor. Among the newly diagnosed cancers in 2016, 60% occurred in people  $\geq 65$  years old; this age group accounted for 19% of Florida's 2016 population.

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The most common cancers in Floridians were lung and bronchus (14%), female breast (14%), prostate (11%) and colorectal (10%). These accounted for 52% of all new cases in blacks and 46% of all new cases in whites.

New cancer diagnoses and deaths in Florida in 2016

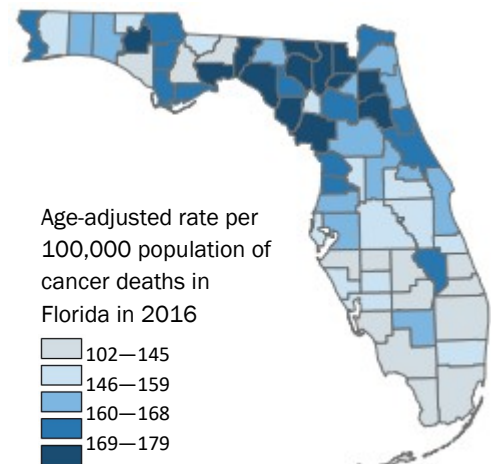
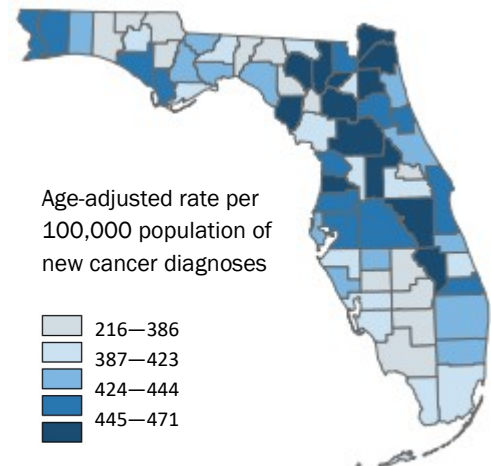


Collectively, the number of new cancer cases and deaths that occurred in Miami-Dade, Broward, Palm Beach, Hillsborough and Pinellas counties accounted for approximately 38% of new cancer diagnoses and 36% of cancer deaths in Florida during 2016.

For all cancers combined, the Florida age-adjusted rate of occurrence for new cancer cases was 434.8 per 100,000 population and 148.9 per 100,000 population for cancer-related deaths.

Characteristic	All Cancer Diagnoses	All Cancer Deaths
Florida	120,431	43,653
<b>Sex</b>		
Female	58,702	20,111
Male	61,691	23,542
<b>Race</b>		
Black	12,628	4,620
White	101,574	38,027
<b>Sex and race</b>		
Black female	6,491	2,343
White female	49,465	17,269
Black male	6,134	2,277
White male	52,078	20,758

Cancer remains the second leading cause of death in Florida with over 43,000 cancer deaths occurring in 2016. In years of potential life lost up to age 75, cancer ranks first, surpassing heart disease and stroke combined and unintentional injuries.



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## Cancer Appendix: 2016 Data

Number of new cancer diagnoses by sex and race in Florida in 2016

Characteristic	All Cancers	Lung and Bronchus	Female Breast	Prostate	Colorectal	Melanoma
Florida	120,431	16,954	16,721	12,686	10,078	6,369
<b>Sex</b>						
Female	58,702	8,010	16,721	NA	4,765	2,285
Male	61,691	8,937	NA	12,686	5,310	4,083
<b>Race</b>						
Black	12,628	1,356	1,991	2,002	1,199	–
White	101,574	15,090	13,910	9,492	8,397	6,369
<b>Sex and race</b>						
Black female	6,491	573	1,991	NA	590	–
White female	49,465	7,227	13,910	NA	3,954	2,285
Black male	6,134	783	NA	2,002	609	–
White male	52,078	7,857	NA	9,492	4,440	4,083

Number of new cancer diagnoses by sex and race in Florida in 2016 (continued)

Characteristic	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Ovary	Cervix
Florida	5,581	5,056	4,980	1,561	1,068
<b>Sex</b>					
Female	1,313	1,257	2,239	1,561	1,068
Male	4,267	3,799	2,739	NA	NA
<b>Race</b>					
Black	264	422	437	158	207
White	4,789	4,408	4,308	1,340	799
<b>Sex and race</b>					
Black female	82	116	192	158	207
White female	1,091	1,082	1,908	1,340	799
Black male	182	306	244	NA	NA
White male	3,697	3,326	2,399	NA	NA

Number of cancer deaths by sex and race in Florida in 2016

Characteristic	All Cancers	Lung and Bronchus	Female Breast	Prostate	Colorectal	Melanoma
Florida	43,653	10,983	2,846	2,171	3,811	618
<b>Sex</b>						
Female	20,111	4,948	2,846	NA	1,760	182
Male	23,542	6,035	NA	2,171	2,051	436
<b>Race</b>						
Black	4,620	840	420	340	518	–
White	38,027	9,942	2,344	1,797	3,205	618
<b>Sex and race</b>						
Black female	2,343	348	420	NA	262	–
White female	17,269	4,511	2,344	NA	1,456	182
Black male	2,277	492	NA	340	256	–
White male	20,758	5,431	NA	1,797	1,749	436

– Counts for cells with <10 cases are suppressed  
 NA Not applicable for gender-specific cancer types

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Number of cancer deaths by sex and race in Florida in 2016 (continued)

Characteristic	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Ovary	Cervix
Florida	1,366	1,198	1,497	983	324
<b>Sex</b>					
Female	350	297	658	983	324
Male	1,016	901	839	NA	NA
<b>Race</b>					
Black	79	112	138	79	59
White	1,272	1,060	1,324	869	259
<b>Sex and race</b>					
Black female	34	27	73	79	59
White female	312	267	572	869	259
Black male	45	85	65	NA	NA
White male	960	793	752	NA	NA

Age-adjusted cancer incidence and mortality rates per 100,000 population per year in Florida in 2016 (age adjusted to the 2000 U.S. Standard Population)

	Age-Adjusted Incidence Rate (Confidence Interval)	Age-Adjusted Mortality Rate (Confidence Interval)
<b>All Cancers</b>	<b>434.8 (432.2, 437.3)</b>	<b>148.9 (147.5, 150.4)</b>
Female Breast	120.3 (118.4, 122.3)	18.8 (18.1, 19.6)
Prostate	91.1 (89.5, 92.7)	16.3 (15.6, 17.0)
Lung and Bronchus	57.3 (56.5, 58.2)	36.7 (36.0, 37.4)
Colorectal	36.3 (35.6, 37.1)	13.1 (12.7, 13.5)
Melanoma	27.7 (27.0, 28.4)	2.5 (2.3, 2.7)
Bladder	18.7 (18.2, 19.3)	4.5 (4.3, 4.7)
Head and Neck	18.1 (17.6, 18.6)	4.1 (3.9, 4.3)
Non-Hodgkin's Lymphoma	18.4 (17.9, 18.9)	5.2 (4.9, 5.4)
Ovary	11.2 (10.6, 11.8)	6.2 (5.8, 6.7)
Cervix	9.6 (9.0, 10.3)	2.6 (2.3, 2.9)

Number of new cancer diagnoses by county in Florida in 2016

	All Cancers	Lung and Bronchus	Prostate	Female Breast	Colorectal	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Melanoma	Ovary	Cervix
<b>Florida</b>	<b>120,431</b>	<b>16,954</b>	<b>12,686</b>	<b>16,721</b>	<b>10,078</b>	<b>5,581</b>	<b>5,056</b>	<b>4,980</b>	<b>6,369</b>	<b>1,561</b>	<b>1,068</b>
Alachua	1,289	163	130	192	99	37	62	49	79	14	13
Baker	143	16	10	26	12	–	–	–	–	–	–
Bay	1,029	181	120	140	88	37	50	41	53	12	10
Bradford	148	25	16	17	12	–	–	–	15	–	–
Brevard	4,124	713	359	520	327	166	182	160	311	67	27
Broward	10,032	1,158	1,133	1,482	863	429	387	406	438	125	86
Calhoun	74	21	–	10	12	–	–	–	–	–	–
Charlotte	1,484	236	185	183	114	85	62	59	104	14	–
Citrus	1,309	218	126	159	113	65	68	55	70	21	10
Clay	1,116	187	85	169	112	50	46	48	63	17	13
Collier	2,253	250	354	280	158	117	90	96	198	29	18
Columbia	433	73	45	60	46	13	29	13	18	–	–
Desoto	164	29	18	14	23	–	–	–	–	–	–
Dixie	121	28	10	12	12	–	–	–	–	–	–
Duval	5,252	746	507	759	394	207	234	245	263	62	66

– Counts for cells with <10 cases are suppressed

NA Not applicable for gender-specific cancer types

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Number of new cancer diagnoses by county in Florida in 2016 (continued)

	All Cancers	Lung and Bronchus	Prostate	Female Breast	Colorectal	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Melanoma	Ovary	Cervix
Escambia	1,751	324	150	250	141	89	86	75	107	–	15
Flagler	838	123	68	112	65	45	36	27	85	13	–
Franklin	77	15	10	10	–	–	–	–	–	–	–
Gadsden	264	34	33	34	24	12	12	–	–	–	–
Glchrist	93	24	–	–	–	–	–	–	–	–	–
Gades	57	–	–	–	–	–	–	–	11	–	–
Gulf	109	22	–	12	–	–	–	–	–	–	–
Hamilton	71	–	–	10	–	–	–	–	–	–	–
Hardee	133	22	16	15	21	–	–	–	–	–	–
Hendry	151	24	11	19	10	–	10	–	–	–	–
Hernando	1,487	268	150	192	118	74	53	60	65	21	–
Highlands	719	134	69	103	63	32	29	22	40	–	–
Hillsborough	6,917	895	683	997	632	281	296	304	328	84	75
Holmes	61	13	–	10	–	–	–	–	–	–	–
Indian River	1,210	209	109	138	94	66	48	59	108	21	–
Jackson	219	31	15	23	27	–	13	–	–	–	–
Jefferson	80	18	15	–	–	–	–	–	–	–	–
Lafayette	34	–	–	–	–	–	–	–	–	–	–
Lake	2,603	379	283	339	209	160	126	112	104	31	11
Lee	4,709	717	546	601	336	259	230	197	271	43	40
Leon	1,110	143	145	164	90	34	52	38	42	19	–
Levy	257	51	26	37	26	–	15	–	–	–	–
Liberty	39	–	–	–	–	–	–	–	–	–	–
Madison	95	19	14	–	–	–	–	–	–	–	–
Manatee	2,489	335	306	357	184	147	93	107	192	29	–
Marion	2,955	454	334	368	233	166	112	119	180	43	27
Martin	1,282	168	130	176	90	74	36	55	125	18	12
Miami-Dade	13,002	1,461	1,480	1,806	1,330	476	479	665	285	190	156
Monroe	463	63	50	51	46	–	24	16	43	–	–
Nassau	674	93	76	81	51	24	30	23	52	–	11
Okaloosa	1,006	161	95	147	67	52	52	37	57	11	–
Okeechobee	266	38	23	39	20	10	13	–	–	–	–
Orange	5,239	616	549	776	455	186	217	209	195	72	71
Osceola	1,666	196	182	233	152	51	62	76	62	31	20
Palm Beach	9,222	1,138	997	1,340	703	517	323	402	556	112	52
Pasco	3,349	530	303	444	269	196	141	142	203	50	36
Pinellas	6,639	997	634	982	562	359	325	240	435	85	59
Polk	3,922	615	371	546	325	165	171	136	218	50	45
Putnam	502	122	40	56	44	24	28	13	16	–	–
Santa Rosa	902	156	73	133	82	48	33	40	58	13	–
Sarasota	3,574	544	412	492	244	217	128	158	270	43	22
Seminole	2,044	260	199	325	163	93	71	83	97	30	15
St. Johns	1,341	202	152	189	101	86	65	51	87	24	–
St. Lucie	1,755	281	199	232	131	83	74	52	80	18	15
Sumter	1,293	193	167	201	104	78	42	42	46	18	–
Suwannee	323	59	36	31	27	11	25	11	12	–	–
Taylor	131	26	12	18	10	–	–	–	–	–	–
Union	204	35	31	11	18	–	22	11	–	–	–
Volusia	3,526	547	304	486	324	150	165	125	221	55	21
Wakulla	156	34	22	15	10	–	–	–	–	–	–
Walton	322	71	26	38	23	17	25	13	–	–	–
Washington	129	24	–	18	10	–	–	–	–	–	–

-- Counts for cells with <10 cases are suppressed

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### Number of cancer deaths by county in Florida in 2016

	All Cancers	Lung and Bronchus	Prostate	Female Breast	Colorectal	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Melanoma	Ovary	Cervix
<b>Florida</b>	<b>43,653</b>	<b>10,983</b>	<b>2,171</b>	<b>2,846</b>	<b>3,811</b>	<b>1,366</b>	<b>1,198</b>	<b>1,497</b>	<b>618</b>	<b>983</b>	<b>324</b>
Alachua	465	101	24	29	34	17	20	17	–	11	–
Baker	65	21	–	–	–	–	–	–	–	–	–
Bay	280	90	16	20	24	–	10	–	–	–	–
Bradford	63	12	–	–	–	–	–	–	–	–	–
Brevard	1,634	462	72	97	131	54	41	53	33	44	13
Broward	3,393	693	171	259	312	99	87	111	44	77	26
Calhoun	34	16	–	–	–	–	–	–	–	–	–
Charlotte	593	156	35	36	50	20	–	27	–	14	–
Citrus	548	161	18	32	59	25	23	22	–	11	–
Clay	413	120	14	24	40	–	10	–	–	–	–
Collier	753	184	41	47	61	32	18	25	16	21	–
Columbia	191	62	–	12	–	–	–	–	–	–	–
Desoto	77	22	–	–	–	–	–	–	–	–	–
Dixie	51	11	–	–	–	–	–	–	–	–	–
Duval	1,675	417	78	110	136	42	57	67	23	39	20
Escambia	696	199	31	40	57	22	22	26	14	12	–
Flagler	333	93	16	20	27	12	–	13	–	–	–
Franklin	33	11	–	–	–	–	–	–	–	–	–
Gadsden	97	21	–	–	–	–	–	–	–	–	–
Glchrist	34	10	–	–	–	–	–	–	–	–	–
Gades	29	–	–	–	–	–	–	–	–	–	–
Gulf	41	14	–	–	–	–	–	–	–	–	–
Hamilton	30	10	–	–	–	–	–	–	–	–	–
Hardee	42	18	–	–	–	–	–	–	–	–	–
Hendry	65	17	–	–	–	–	–	–	–	–	–
Hernando	614	181	17	33	46	20	20	18	11	14	–
Highlands	319	94	16	22	24	14	10	–	–	–	–
Hillsborough	2,354	574	113	150	235	61	71	87	29	63	19
Holmes	46	13	–	–	–	–	–	–	–	–	–
Indian River	494	135	37	34	42	21	–	14	–	–	–
Jackson	121	31	11	–	16	–	–	–	–	–	–
Jefferson	45	–	–	–	–	–	–	–	–	–	–
Lafayette	17	–	–	–	–	–	–	–	–	–	–
Lake	950	249	40	45	81	31	18	28	12	25	–
Lee	1,667	457	87	99	117	56	51	62	32	41	10
Leon	379	85	15	27	39	–	–	12	–	10	–
Levy	123	39	–	–	–	–	–	–	–	–	–
Liberty	11	–	–	–	–	–	–	–	–	–	–
Madison	45	14	–	–	–	–	–	–	–	–	–
Manatee	857	220	33	50	59	31	20	24	22	21	–
Marion	1,060	261	58	54	112	33	35	34	12	22	–
Martin	426	107	15	22	41	19	–	14	–	–	–
Miami-Dade	4,409	876	293	313	452	113	93	187	37	103	41
Monroe	167	36	11	12	20	–	–	–	–	–	–
Nassau	201	56	–	12	10	–	–	–	–	–	–
Ocaloosa	389	114	18	19	26	–	–	11	–	–	–
Okeechobee	98	29	–	–	–	–	–	–	–	–	–
Orange	1,817	414	95	137	161	55	57	57	17	33	14
Osceola	481	103	20	42	37	10	18	16	–	11	–
Palm Beach	3,258	748	179	224	296	116	53	134	47	87	23
Pasco	1,321	399	49	80	122	43	42	38	21	29	–

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Number of cancer deaths by county in Florida in 2016 (continued)

	All Cancers	Lung and Bronchus	Prostate	Breast	Colorectal	Bladder	Head and Neck	Non-Hodgkin's Lymphoma	Melanoma	Ovary	Cervix
Pinellas	2,424	693	109	156	209	90	77	78	43	57	10
Polk	1,422	402	58	97	103	48	47	42	24	22	10
Putnam	238	85	–	–	17	–	–	–	–	–	–
Santa Rosa	320	80	14	26	23	12	–	–	–	–	–
Sarasota	1,360	330	76	92	93	44	37	52	17	32	–
Seminole	833	208	44	61	68	20	33	34	13	16	–
St. Johns	456	125	24	34	36	17	13	17	12	18	–
St. Lucie	777	209	33	54	75	20	24	27	–	13	–
Sumter	468	105	41	25	29	16	–	15	–	13	–
Suwannee	141	36	–	–	17	–	–	–	–	–	–
Taylor	62	15	–	–	–	–	–	–	–	–	–
Union	78	27	–	–	–	–	–	–	–	–	–
Volusia	1,495	402	64	90	133	50	44	40	19	28	–
Wakulla	61	17	–	–	–	–	–	–	–	–	–
Walton	146	41	–	–	17	–	–	–	–	–	–
Washington	68	25	–	–	–	–	–	–	–	–	–

–Counts for cells with <10 cases are suppressed