

# **FLHealthCHARTS.com Statistical Brief**

# Trends in Melanoma Incidence and Mortality in Florida 2007 - 2016

## Description

According to the national Cancer institute (NCI): "Melanoma is a disease in which malignant (cancer) cells form in melanocytes (cells that color the skin)." Risk factors for melanoma include fair skin, exposure to sunlight, and severe sunburn.

Table 1 below shows the number of cases and the age adjusted incidence rates (AAIR) for melanoma. The AAIR for the White population is consistently more than 20 times the AAIR for the Black population. The highest number of melanoma cases for the Black population was 39 in 2016, and the highest number of cases for the White population was 6,369 also in 2016.

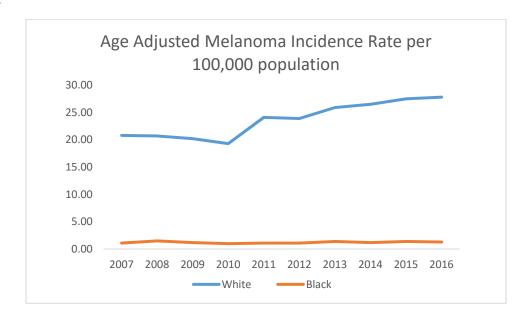
Table 1

Florida Melanoma Cases and Rates by Race 2007 - 2016

			White	Black
			Age Adjusted	Age Adjusted
	White	Black	Incidence Rate	Incidence Rate
	Melanoma	Melanoma	Per 100,000	Per 100,000
Year	Cases	Cases	Population	Population
2007	3,964	23	20.8	1.1
2008	4,002	32	20.7	1.5
2009	3,962	30	20.2	1.2
2010	3,852	22	19.3	1.0
2011	4,928	28	24.1	1.1
2012	4,981	27	23.9	1.1
2013	5,535	38	25.9	1.4
2014	5,781	33	26.5	1.2
2015	6,183	37	27.5	1.4
2016	6,369	39	27.8	1.3

Source: Florida Department of Health CHARTS and Florida Cancer Data System (FCDS)

Graph 1



Deaths from melanoma occur predominately in the White population. Table 2 shows the number of deaths and the age adjusted death rates (AADR) for melanoma. There are relatively few melanoma deaths in the Black population and the White AADR varies from six to 17 times as high as the Black AADR.

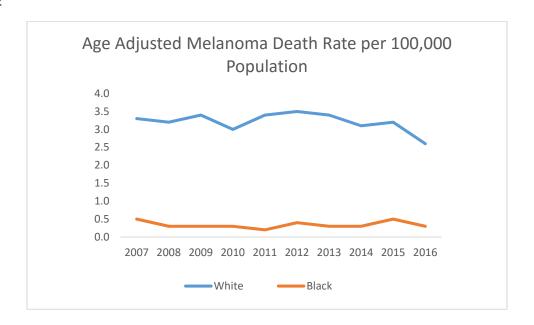
Table 2

Florida Melanoma Deaths and Rates by Race 2007 - 2016

			White	Black
			Age Adjusted	Age Adjusted
	White	Black	Death Rate	Death Rate
	Melanoma	Melanoma	Per 100,000	Per 100,000
Year	Deaths	Deaths	Population	Population
2007	682	10	3.3	0.5
2008	662	7	3.2	0.3
2009	715	8	3.4	0.3
2010	644	8	3.0	0.3
2011	744	6	3.4	0.2
2012	760	9	3.5	0.4
2013	766	7	3.4	0.3
2014	721	9	3.1	0.3
2015	734	12	3.2	0.5
2016	634	11	2.6	0.3

Source: Florida Department of Health CHARTS and Florida Vital Statistics

Graph 2



Graphs 1 and 2 indicate that for the White population, in the years 2012 through 2016, the incidence rates have been increasing while the death rates have been decreasing. The average annual percent change (AAPC) also reflects this pattern. For the period 2012 through 2016 the AAPC for the White incidence rate was 3.69% with a 95% confidence interval of 1.47% to 5.96%. In contrast, the AAPC for the White death rate for the same period was -6.34 with a 95% confidence interval of -11.96 to -0.37. Both of these AAPCs are statistically significant at the 0.05 alpha level.

#### Discussion

Melanoma is a serious form of cancer that occurs mostly in the White population. The recent pattern of increasing incidence rates and decreasing death rates may be due to increased screening and improved treatment. Increased screening could result in finding more cases and thereby increasing the incidence rate, while improved treatment and earlier detection could be contributing to the decrease in death rates.

### **References:**

1. National Cancer Institute (NCI): <a href="https://www.cancer.gov/types/skin/patient/melanoma-treatment-pdq">https://www.cancer.gov/types/skin/patient/melanoma-treatment-pdq</a>