



MISSISSIPPI STATE DEPARTMENT OF HEALTH

# **2016 REGIONAL CANCER SNAPSHOT: FIVE-YEAR AGE-ADJUSTED CANCER RATES IN MISSISSIPPI BY GENDER, RACE, AND CANCER COALITION REGION**

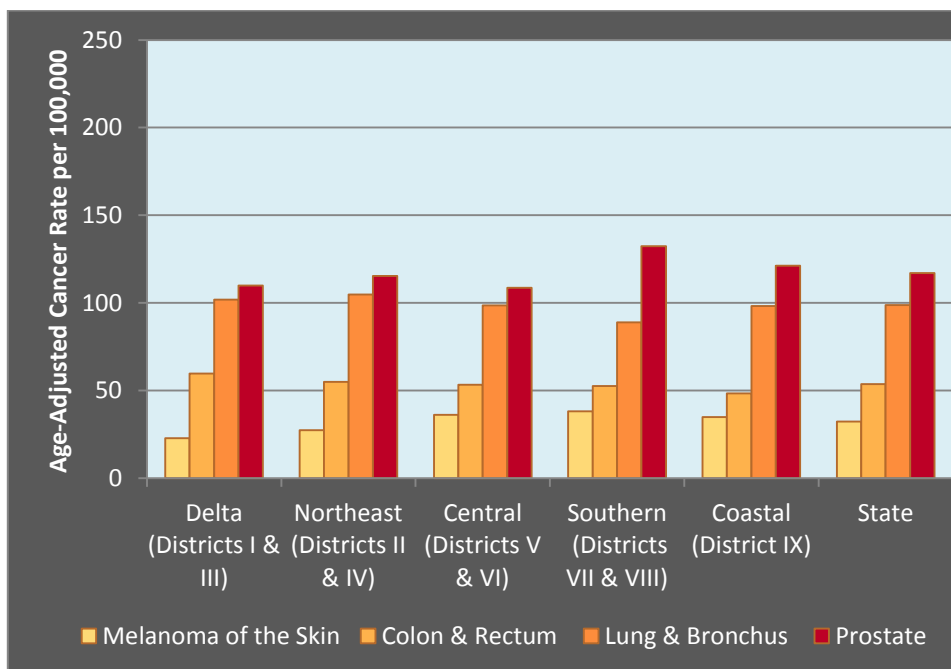
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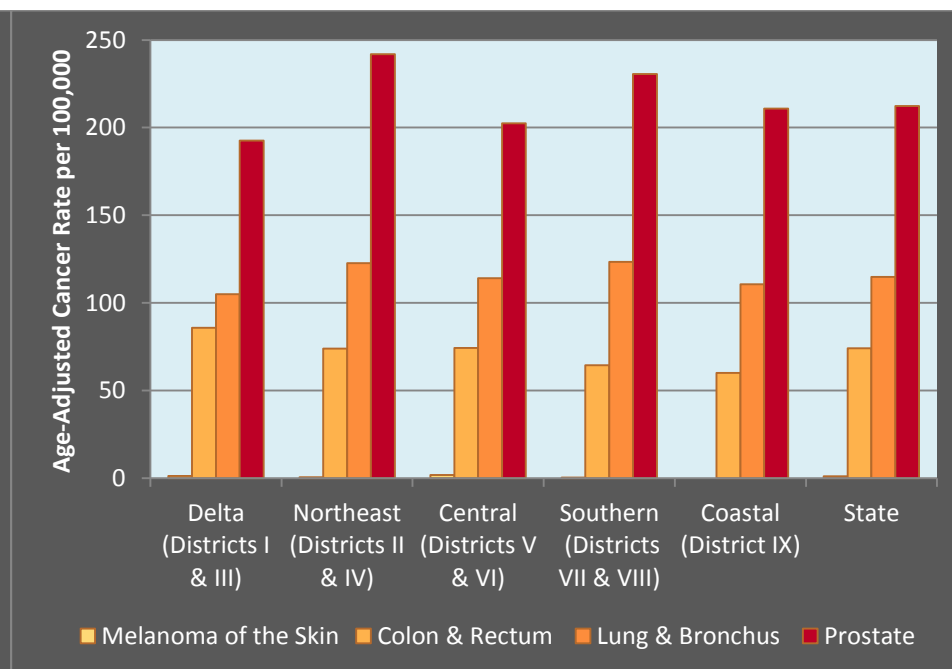
*This surveillance brief provides data to be utilized by the Mississippi Comprehensive Cancer Control Program (MCCCP) and the Mississippi Partnership for Comprehensive Cancer Control (MP3C) to plan activities targeting cancers with high incidence and mortality in each Cancer Regional Coalition in the state. MSDH developed this report with the cooperation and collaboration of the Mississippi Cancer Registry (MCR), Deirdre B. Rogers, Director. Data was obtained from the 2016 Mississippi Cancer Registry (MCR), on June 15, 2016. This document was supported in part by a cooperative agreement (CDC-RFA-DP12-1205) from the Centers for Disease Control and Prevention - Division of Cancer Prevention and Control's Comprehensive Cancer Control Program (U58DP003923-04).*

## FIVE-YEAR AGE-ADJUSTED INVASIVE CANCER INCIDENCE RATES<sup>1,2</sup> IN MISSISSIPPI BY CANCER COALITION REGION, MALES, 2009-2013

### White Males



### Black Males



Cancer Coalition Region	Melanoma of the Skin		Colon & Rectum		Lung & Bronchus		Prostate	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Delta (Districts I & III)	178	22.9	458	59.7	803	101.9	919	110.0
Northeast (Districts II & IV)	316	27.4	652	55.0	1,264	104.9	1,456	115.3
Central (Districts V & VI)	465	36.2	704	53.3	1,301	98.7	1,553	108.7
Southern (Districts VII & VIII)	323	38.1	448	52.5	786	89.0	1,230	132.5
Coastal (District IX)	340	34.8	493	48.4	1,001	98.3	1,338	121.3
<b>STATE TOTAL<sup>3</sup></b>	<b>1,624</b>	<b>32.3</b>	<b>2,756</b>	<b>53.6</b>	<b>5,155</b>	<b>98.9</b>	<b>6,497</b>	<b>117.0</b>

Cancer Coalition Region	Melanoma of the Skin		Colon & Rectum		Lung & Bronchus		Prostate	
	Total <sup>4</sup>	Rate <sup>5</sup>	Total	Rate	Total	Rate	Total	Rate
Delta (Districts I & III)	5	-	372	85.9	466	105.0	886	192.6
Northeast (Districts II & IV)	-	-	239	74.0	381	122.8	801	241.9
Central (Districts V & VI)	12	-	529	74.4	771	114.1	1,510	202.4
Southern (Districts VII & VIII)	-	-	211	64.4	404	123.4	796	230.6
Coastal (District IX)	-	-	98	60.1	181	110.7	366	210.9
<b>STATE TOTAL<sup>3</sup></b>	<b>22</b>	<b>1.2</b>	<b>1,449</b>	<b>74.1</b>	<b>2,203</b>	<b>114.8</b>	<b>4,361</b>	<b>212.4</b>

<sup>1</sup>Rate: Age-adjusted Cancer Incidence Rate to the 2000 U.S. Standard Population

<sup>2</sup>Invasive Cancer: Excludes in situ cancers

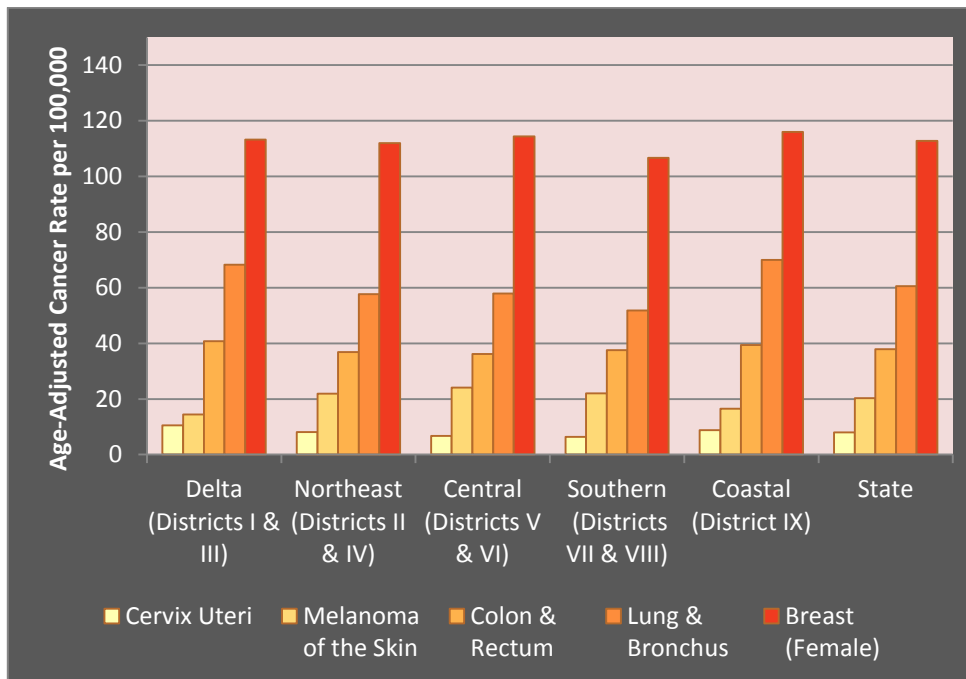
<sup>3</sup>Region numbers may not sum to the state totals due to unknown counties

<sup>4</sup>Rates/Counts are suppressed if less than 5 cases were reported in the specific category

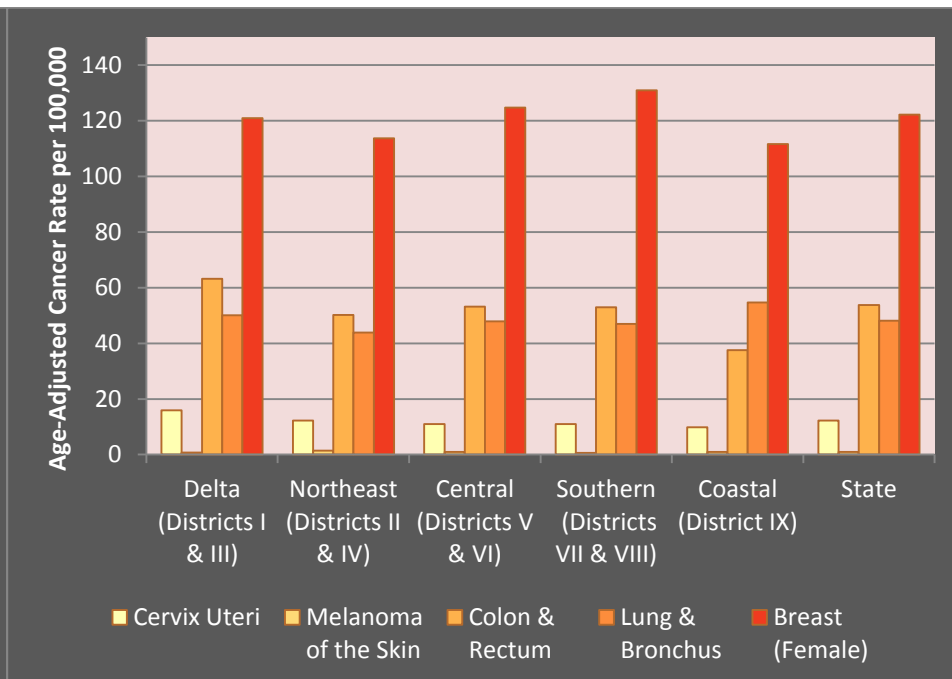
<sup>5</sup>A minimum of 15 cases are required to calculate a stable age-adjusted rate

## FIVE-YEAR AGE-ADJUSTED INVASIVE CANCER INCIDENCE RATES<sup>1,2</sup> IN MISSISSIPPI BY CANCER COALITION REGION, *FEMALES*, 2009-2013

### White Females



### Black Females



Cancer Coalition Region	Cervix Uteri		Melanoma of the Skin		Colon & Rectum		Lung & Bronchus		Breast	
	Total	Rate	Total	Rate	Total	Rate	Total	Rate	Total	Rate
Delta (Districts I & III)	70	10.5	112	14.4	374	40.8	644	68.3	992	113.2
Northeast (Districts II & IV)	89	8.1	273	21.9	539	36.9	848	57.7	1,514	112.0
Central (Districts V & VI)	81	6.8	317	24.1	580	36.2	960	58.0	1,732	114.4
Southern (Districts VII & VIII)	48	6.4	193	22.1	394	37.6	544	51.9	1,059	106.6
Coastal (District IX)	78	8.8	172	16.5	448	39.4	821	70.0	1,281	116.0
<b>STATE TOTAL<sup>3</sup></b>	<b>366</b>	<b>8.0</b>	<b>1,067</b>	<b>20.3</b>	<b>2,335</b>	<b>37.9</b>	<b>3,818</b>	<b>60.6</b>	<b>6,582</b>	<b>112.7</b>

Cancer Coalition Region	Cervix Uteri		Melanoma of the Skin		Colon & Rectum		Lung & Bronchus		Breast	
	Total	Rate	Total <sup>4</sup>	Rate <sup>5</sup>	Total	Rate	Total	Rate	Total	Rate
Delta (Districts I & III)	104	15.9	5	-	396	63.2	302	50.1	791	121.0
Northeast (Districts II & IV)	55	12.2	6	-	220	50.2	192	43.9	518	113.7
Central (Districts V & VI)	110	11.0	9	-	502	53.2	442	47.9	1,231	124.7
Southern (Districts VII & VIII)	48	10.9	-	-	236	53.0	207	47.0	587	130.9
Coastal (District IX)	20	9.8	-	-	75	37.5	109	54.7	238	111.6
<b>STATE TOTAL<sup>3</sup></b>	<b>337</b>	<b>12.2</b>	<b>25</b>	<b>1.0</b>	<b>1,429</b>	<b>53.8</b>	<b>1,252</b>	<b>48.1</b>	<b>3,366</b>	<b>122.2</b>

<sup>1</sup>Rate: Age-adjusted cancer incidence rate to the 2000 U.S. Standard Population

<sup>2</sup>Invasive Cancer: Excludes in situ cancers

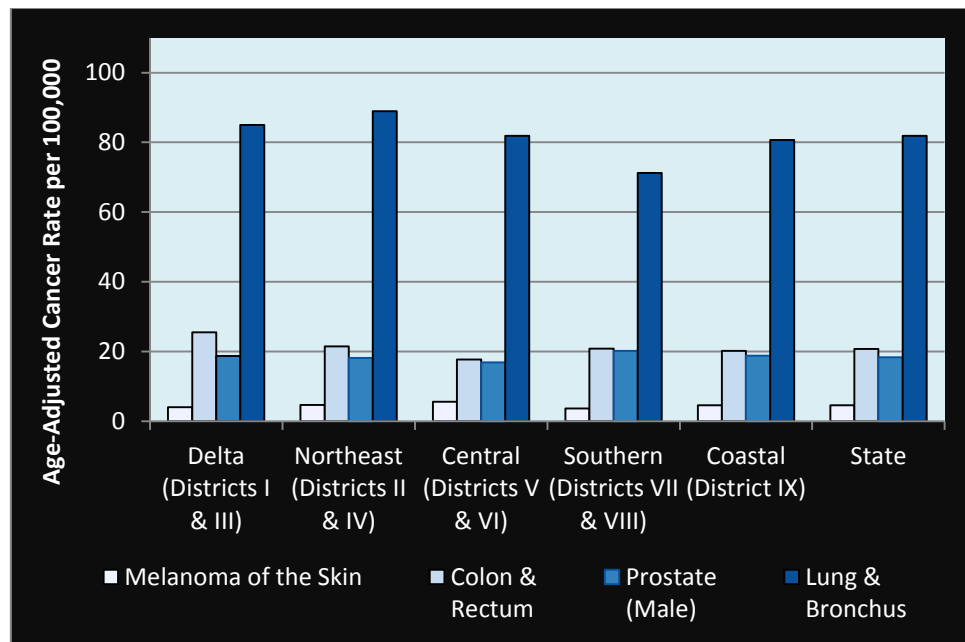
<sup>3</sup>Region numbers may not sum to the state totals due to unknown counties

<sup>4</sup>Rates/Counts are suppressed if less than 5 cases were reported in the specific category

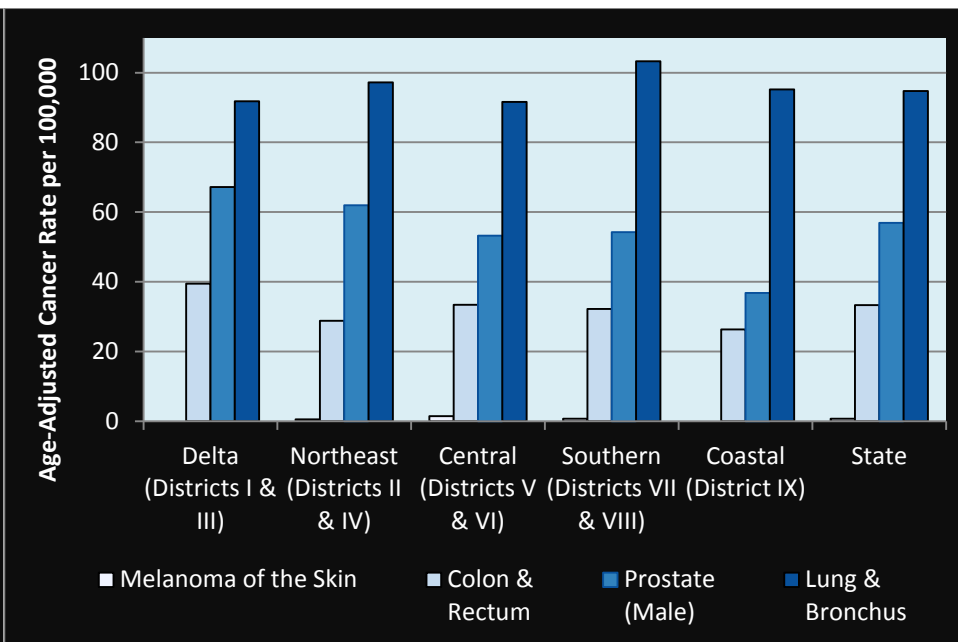
<sup>5</sup>A minimum of 15 cases are required to calculate a stable age-adjusted rate

## FIVE-YEAR AGE-ADJUSTED CANCER MORTALITY RATES<sup>1</sup> IN MISSISSIPPI BY CANCER COALITION REGION, *MALES*, 2009-2013

### White Males



### Black Males



Cancer Coalition Region	Melanoma of the Skin		Colon & Rectum		Prostate		Lung & Bronchus	
	Death	Rate	Death	Rate	Death	Rate	Death	Rate
	Delta (Districts I & III)	29	4.1	185	25.5	124	18.8	658
Northeast (Districts II & IV)	54	4.7	249	21.5	187	18.2	1,048	88.9
Central (Districts V & VI)	70	5.7	227	17.7	194	16.9	1,052	81.8
Southern (Districts VII & VIII)	29	3.7	174	20.9	153	20.3	620	71.3
Coastal (District IX)	43	4.6	199	20.2	153	18.8	809	80.7
<b>STATE TOTAL<sup>3</sup></b>	<b>225</b>	<b>4.7</b>	<b>1,034</b>	<b>20.8</b>	<b>811</b>	<b>18.4</b>	<b>4,187</b>	<b>81.9</b>

Cancer Coalition Region	Melanoma of the Skin		Colon & Rectum		Prostate		Lung & Bronchus	
	Death <sup>4</sup>	Rate <sup>5</sup>	Death	Rate	Death	Rate	Death	Rate
	Delta (Districts I & III)	0	-	152	39.5	206	67.2	391
Northeast (Districts II & IV)	-	-	90	28.9	134	62.0	298	97.2
Central (Districts V & VI)	9	-	205	33.4	266	53.2	592	91.6
Southern (Districts VII & VIII)	-	-	95	32.2	131	54.3	329	103.3
Coastal (District IX)	0	-	40	26.4	44	36.9	141	95.2
<b>STATE TOTAL<sup>3</sup></b>	<b>13</b>	<b>-</b>	<b>582</b>	<b>33.4</b>	<b>781</b>	<b>56.9</b>	<b>1,751</b>	<b>94.7</b>

<sup>1</sup>Rate = Age-adjusted cancer mortality rate to the 2000 U.S. Standard Population

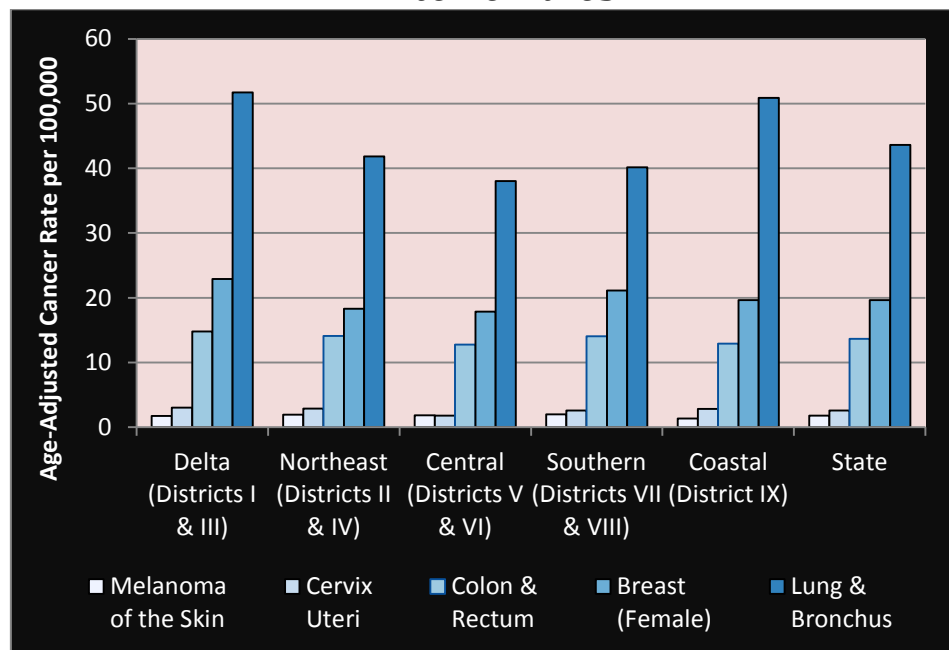
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<sup>4</sup>Rates/Counts are suppressed if less than 5 cases were reported in the specific category

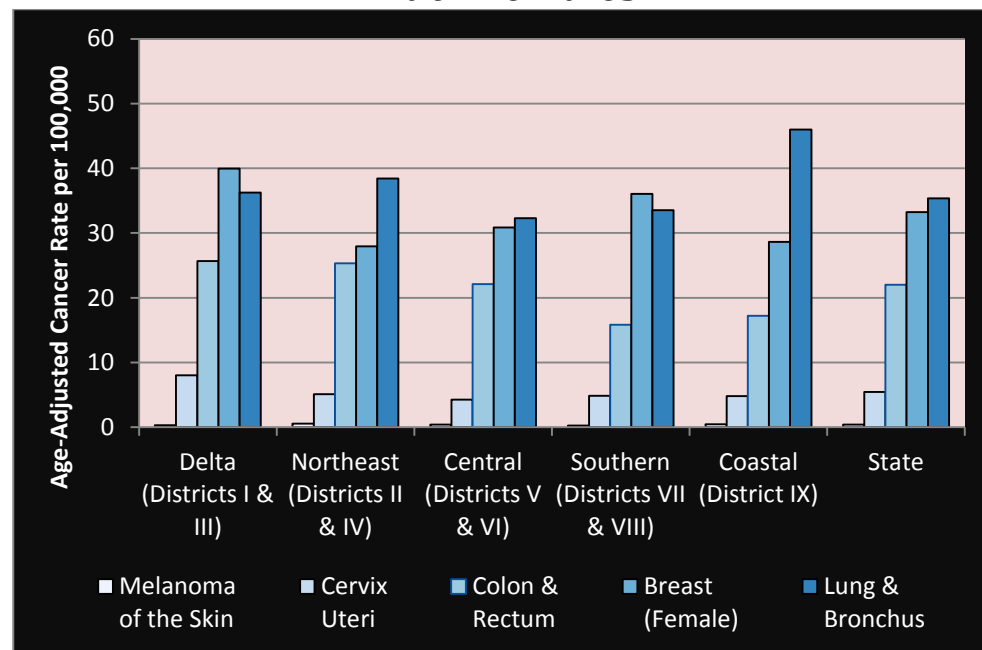
<sup>5</sup>A minimum of 15 cases are required to calculate a stable age-adjusted rate

## FIVE-YEAR AGE-ADJUSTED CANCER MORTALITY RATES<sup>1</sup> IN MISSISSIPPI BY CANCER COALITION REGION, *FEMALES*, 2009-2013

### White Females



### Black Females



Cancer Coalition Region	Melanoma of the Skin		Cervix Uteri		Colon & Rectum		Breast		Lung & Bronchus	
	Death	Rate	Death	Rate	Death	Rate	Death	Rate	Death	Rate
Delta (Districts I & III)	14	1.7	24	3.1	145	14.8	211	22.9	490	51.7
Northeast (Districts II & IV)	29	1.9	34	2.9	217	14.1	263	18.3	623	41.8
Central (Districts V & VI)	28	1.8	27	1.8	219	12.8	293	17.9	647	38.0
Southern (Districts VII & VIII)	20	2.0	23	2.6	155	14.1	224	21.1	431	40.2
Coastal (District IX)	16	1.4	26	2.8	148	12.9	220	19.7	592	50.9
<b>STATE TOTAL<sup>3</sup></b>	<b>107</b>	<b>1.8</b>	<b>134</b>	<b>2.6</b>	<b>884</b>	<b>13.7</b>	<b>1,211</b>	<b>19.6</b>	<b>2,783</b>	<b>43.6</b>

Cancer Coalition Region	Melanoma of the Skin		Cervix Uteri		Colon & Rectum		Breast		Lung & Bronchus	
	Death <sup>4</sup>	Rate <sup>5</sup>	Death	Rate	Death	Rate	Death	Rate	Death	Rate
Delta (Districts I & III)	-	-	52	8.0	157	25.7	253	40.0	215	36.3
Northeast (Districts II & IV)	-	-	22	5.1	106	25.4	128	28.0	166	38.4
Central (Districts V & VI)	5	-	39	4.3	202	22.1	302	30.9	299	32.3
Southern (Districts VII & VIII)	-	-	22	4.9	72	15.8	156	36.0	144	33.5
Coastal (District IX)	-	-	10	4.8	30	17.2	62	28.6	83	46.0
<b>STATE TOTAL<sup>3</sup></b>	<b>11</b>	<b>-</b>	<b>145</b>	<b>5.4</b>	<b>567</b>	<b>22.0</b>	<b>901</b>	<b>33.3</b>	<b>907</b>	<b>35.4</b>

<sup>1</sup>Rate = Age-adjusted cancer mortality rate to the 2000 U.S. Standard Population

<sup>3</sup>Region numbers may not sum to the state totals due to unknown counties

<sup>4</sup>Rates/Counts are suppressed if less than 5 cases were reported in the specific category

<sup>5</sup>A minimum of 15 cases are required to calculate a stable age-adjusted rate

## Glossary:

**Incidence rate** is the number of new cancer cases that have occurred during a specified time period (years 2009 to 2013) divided by the population at risk during that period. This result is then multiplied by a multiplier (100,000).

**Mortality rate** is the number of people who died due to cancer during a given period of time (years 2009 to 2013) divided by the population during the period. This result is then multiplied by a multiplier (100,000).

**Age-adjusted rates** ensure that differences in **incidence** (new cases) or **mortality** (deaths) from one year to another or between one geographic area and another are not due to differences in the age distribution of the populations being compared.<sup>i</sup> Readers should not compare this data with published cancer rates that were not adjusted to the 2000 U.S. standard population.

**Non-invasive cancer** describes disease that has not spread outside the tissue in which it began.<sup>ii</sup>

**Invasive cancer:** Cancer that has spread beyond the layer of tissue in which it developed and is growing into surrounding, healthy tissues.<sup>iii</sup>

**Skin cancer:** Skin cancer is the *most common form of cancer in the United States*. There are three main types of skin cancer: a) Basal cell carcinoma, b) Squamous cell carcinoma, and c) Melanoma. Basal cell and squamous cell carcinomas are highly curable, but can be disfiguring and costly. Melanoma, is more dangerous and causes the most deaths.<sup>iv</sup> The counts and rates in this snapshot correspond to melanoma.

- (i) U.S. Cancer Statistics Working Group. *United States Cancer Statistics: 2004 Incidence and Mortality*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2007.
- (ii) National Cancer Institute (NCI); Dictionary of Cancer Terms.
- (iii) National Cancer Institute (NCI); Dictionary of Cancer Terms.
- (iv) Centers for Disease Control and Prevention (CDC); What is Skin Cancer? 2014