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Background

This section of the report presents the findings of epidemiological analyses of cancer mortality and incidence for the six selected cancer sites: breast, cervical, colorectal, lung, prostate and ovarian cancer. The number of estimated cancer deaths and estimated new cancer cases for 2011 were obtained from the American Cancer Society Cancer Facts and Figures 2011 report.¹

Michigan Mortality, Incidence, and Survival Rates

The 2008 age-adjusted mortality rates and 2007 age-adjusted incidence rates are shown for the selected cancers.^{2,3} Age-adjusted mortality and incidence rates were calculated by the direct age-adjustment method, using the 2000 U.S. population age distribution as the standard population, to allow comparisons across population subgroups.

Age-adjusted mortality and incidence rates were compared between gender and racial groups, and age-specific rates were computed. A comparison of age-adjusted incidence and mortality rates between Michigan and the U.S. is made using data from the National Cancer Institute's SEER Cancer Statistics Review, 1975-2007.⁴ A comparison of the proportions of cases diagnosed at different stages by gender and race highlights disparities where they exist.

National data on five-year relative survival rates is from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute (NCI).⁴ The relative survival rates in this report represent the likelihood that a patient diagnosed will not die from causes associated specifically with the given cancer before five years after their initial cancer diagnosis.

¹ American Cancer Society. (2011). *Cancer Facts and Figures 2011*. Retrieved from:

<http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspc-026238.pdf>

² Michigan Cancer Surveillance Program. (2010). *Michigan Cancer Death Public Use File 1985-2008*. Michigan Department of Community Health (MDCH), Division for Vital Records & Health Statistics.

³ Michigan Cancer Surveillance Program. (2010). *Michigan Cancer Incidence Public Use File 1985-2007*. Michigan Department of Community Health (MDCH), Division for Vital Records & Health Statistics.

⁴ National Cancer Institute. (2011). *SEER Cancer Statistics Review, 1975-2008*. Retrieved from: www.seer.cancer.gov/csr/1975_2008/index.html

Interpretation of cancer trends by county must take into consideration the various factors contributing to changes in stage at diagnosis at the county level. One limitation to consider is the low number of cancer cases in some counties. Several counties had fewer than 20 reported cases for at least one of the time periods and cancer sites. Therefore, a decrease in the percentage of cases localized at diagnosis could reflect a relatively small change in the number of cases at each stage. Also, it is important to note that changes in reporting and staging practices could have changed over time within a county. Usually increases in the percentage of cases localized or in-situ at diagnosis can be associated with an increase in screening but an equivalent decline in the percentage localized or in-situ does not necessarily reflect changes in prevention practices or quality of care.

Summary

Tables 1 and 2 show number of deaths due to cancer and new cancer cases at all sites combined. When looking at all cancer sites combined more cancer deaths occur in the population aged 75 years and older. Mortality from all cancer sites combined is greater among black residents than among white residents of Michigan. Black men are 1.2 times more likely to be diagnosed with cancer than white men, whereas black women and white women are at a similar risk to be newly diagnosed with cancer.

Tables showing statistics for six sites follow: breast cancer (Tables 3 through 12), cervical cancer (Tables 13 through 19), colorectal cancer (Tables 20 through 26), lung cancer (Tables 27 through 33), prostate cancer (Tables 34 through 40), and ovarian cancer (Tables 41 through 47).

Cancer mortality and incidence rates generally increase with increasing age for each of the selected cancer sites. There were 7890 new cases of breast cancer identified in 2011, 550 more than in 2010 (table 3). Female breast cancer incidence rates increase with age. Age adjusted rates of breast cancer in Michigan were slightly lower compared to the national rate (table 7).

Cervical cancer incidence rates peak at age 30 to 49 years, slightly decrease and increase again for women age 60 to 69 years. Prostate cancer mortality rates increase dramatically among men age 65 years and older and prostate cancer incidence rates increase sharply among men beginning at age 50 years.

There were 4,800 new cases of colorectal cancer diagnosed in 2011, 70 less than in 2010. There were another 4,800 deaths attributed to colorectal cancer in 2011, 370 less than in 2010 (table 17). Mortality rates for colorectal cancer increase with increasing age.

Mortality and incidence rates for breast, cervical, colorectal, lung, and prostate cancers are higher among blacks than among whites. However, prostate cancer mortality rates have the greatest disparity between races, as the mortality rate among black men is more than twice that among white men. Mortality and incidence rates for ovarian cancer are higher for white women compared to black women.

Five-year relative survival rates in the U.S. reveal a disparity in survival between blacks and whites. For breast, cervical, colorectal, lung, and ovarian cancers, blacks have a lower survival rate than whites, even when cancers are detected at the same stage. When prostate cancer is detected at a localized or regional stage, the five-year survival rates are 100% for white and black men.

Significant differences were seen in incidence and mortality rates over a ten-year period among counties for breast, cervical, colorectal, lung, prostate, and ovarian cancer sites. An increase in early stage diagnosis was most dramatically seen for prostate cancer.

All Cancer Sites

Table 1: Number of Cancer Deaths and New Cancer Cases by Age Group and Gender, All Sites, Michigan

		All Ages	Under 35	35-54	55-74	75 and Over
Deaths 2008	Total	20,159	209	2,323	8,705	8,922
	Males	10,372	116	1,135	4,690	4,431
	Females	9,787	93	1,188	4,015	4,491
New Cases 2007	Total	52,607	1,683	9,994	25,763	15,167
	Males	27,543	726	4,244	14,725	7,848
	Females	25,046	957	5,746	11,030	7,313

Table 2: Cancer Mortality and Incidence Rates by Gender and Race, All Sites, Michigan

		Rate per 100,000*			Rate Ratio
		Total Population	Whites	Blacks	Blacks/Whites
Mortality 2008	Total	185.5	180.3	225.6	1.3
	Males	223.3	215.8	288.1	1.3
	Females	160.0	156.4	185.7	1.2
Incidence 2007	Total	489.1	476.1	520.8	1.1
	Males	573.3	549.9	648.9	1.2
	Females	429.9	425.5	433.1	1.0

*Rates are age-adjusted and computed by race and gender.

Breast Cancer

Table 3: Estimated Number of Breast Cancer Deaths and New Cases, Michigan
2011

Deaths	1,320
New Cases*	7,890

*Excludes in situ carcinomas.

Note: Numbers are rounded to the nearest 10.

Table 4: Age-Adjusted Breast Cancer Mortality Rate Ranking, Michigan vs. US,
2003-2007

Female Breast	Rate*	Rank**
Michigan	24.5	16
US	24.0	-

* Rate per 100,000 gender-specific population.

**Ranking out of 50 states and the District of Columbia with 1 being the highest mortality rate.

Note: Rates exclude in situ carcinomas.

Table 5: Age-Specific Breast Cancer Deaths and New Breast Cancer Cases,
Michigan 2007-2008

	All Ages	25-39	40-49	50-64	65 Years and Over
Deaths, 2008	1,471	46	132	445	848
New Cases, 2007	6,908	345	1,134	2,543	2,883

Table 6: Breast Cancer Mortality Rates, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	1,471	24.2	22.8
Whites	1,198	22.9	22.2
Blacks	260	35.9	31.4

*Rate per 100,000 race- and gender-specific population.

Table 7: Breast Cancer Incidence Rates, Michigan vs. US, 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	6,908	119.2	124.7
Whites	5,802	117.1	127.4
Blacks	827	115.6	113.1

*Rate per 100,000 race- and gender-specific population.

Table 8: Age- and Race-Specific Breast Cancer Mortality Rates, Michigan 2008

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	46	4.8	33	4.5	13	7.9
40-49	132	17.6	98	15.9	32	29.9
50-64	445	45.3	333	40.1	105	82.0
65 and Older	848	113.0	734	110.9	110	141.8

*Rate per 100,000 age, gender, and race-specific population.

Table 9: Age- and Race-Specific Female Breast Cancer Incidence Rates, Michigan
2007

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	345	35.6	259	34.3	60	36.0
40-49	1,134	147.3	926	145.4	157	144.2
50-64	2,543	264.2	2,093	257.0	329	263.0
65 and Older	2,883	389.7	2,521	386.4	281	366.9

*Rate per 100,000 age, gender, and race-specific population.

Table 10: Female Breast Cancer Five-Year Relative Survival Rates by Stage at
Diagnosis and Race, US 2001-2007

	All Races	White	Black
All stages	89.1	90.4	77.0
Localized	98.6	99.3	92.6
Regional	83.8	85.2	72.1
Distant	23.4	24.9	15.0
Unknown	52.4	52.0	45.2
In Situ*	100.0	100.0	100.0

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

Table 11: Female Breast Cancer Five-Year Relative Survival Rates by Stage at Diagnosis and Race, Michigan 1998*

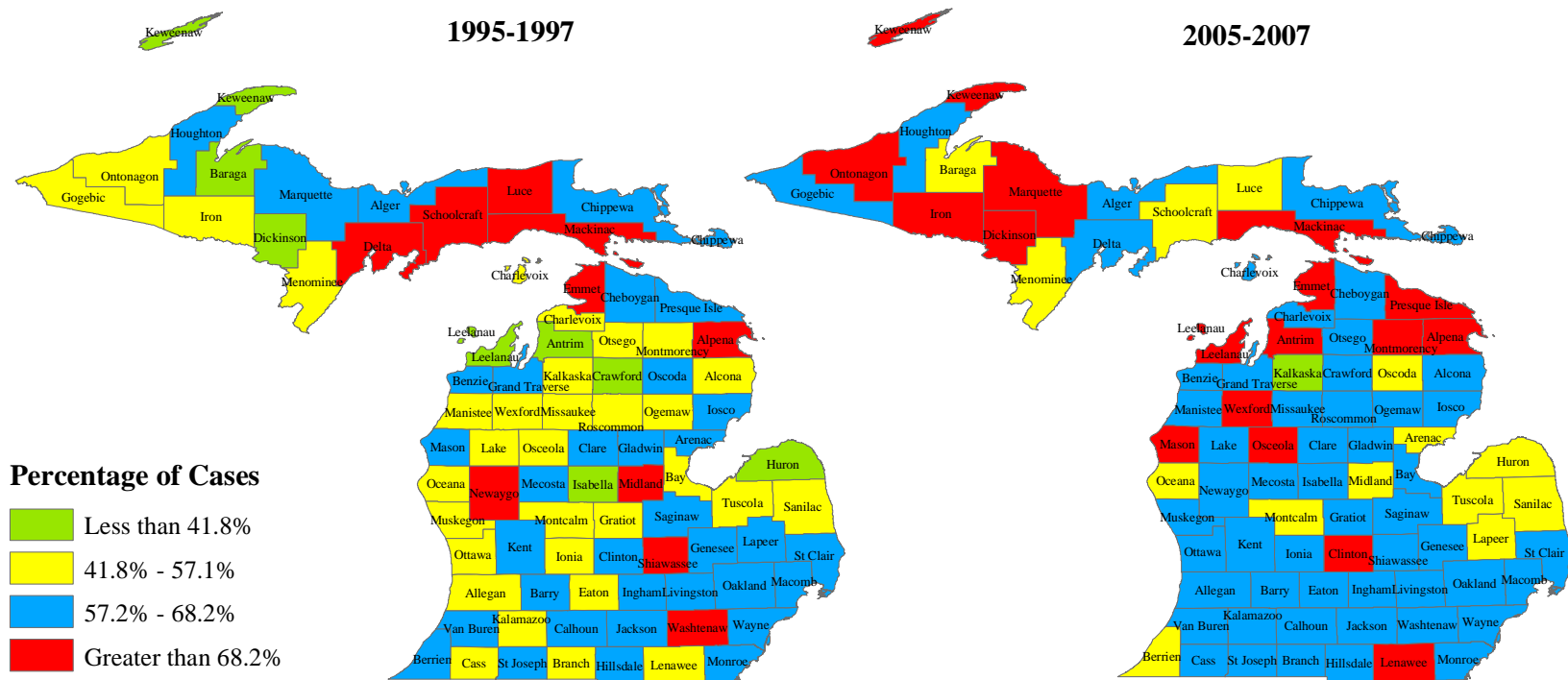
	Total %	White %	Black %
All stages	84.4	85.6	74.5
Localized	94.3	94.6	91.3
Regional	71.1	73.0	60.4
Distant	21.4	22.9	15.2
Unknown	82.0	83.7	71.8

*Five-year relative survival rates for cases diagnosed in 1998 that were still known to be alive in 2003

Table 12: Numbers and Percentages of Invasive Female Breast Cancer (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	6,908	4,415	63.9	1,872	27.1	344	5.0	277	4.0
Whites	5,802	3,788	65.3	1,507	26.0	262	4.5	245	4.2
Blacks	827	442	53.5	283	34.2	76	9.2	26	3.1

Figure 1: Percentage of Female Breast Cancer Cases Localized at Diagnosis by County



Cervical Cancer

Table 13: Estimated Number of New Cervical Cancer Cases, Michigan 2011

New Cases*	360
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*Excludes in situ carcinomas.

Note: Numbers are rounded to the nearest 10. Cervical cancer mortality estimates are not available.

Table 14: Cervical Cancer Mortality Rates, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	116	2.0	2.4
Whites	86	1.8	2.2
Blacks	25	3.4	4.4

*Rate per 100,000 race and gender-specific population.

Table 15: Cervical Cancer Incidence Rates, Michigan vs. US, 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	412	8.0	8.1
Whites	322	7.7	7.9
Blacks	80	11.3	10.1

*Rate per 100,000 race and gender-specific population.

Table 16: Age- and Race-Specific Cervical Cancer Mortality Rates, Michigan 2008

Age (years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
20-29	3	0.5	3	0.6	0	0.0
30-39	11	1.7	5	1.0	6	5.5
40-49	18	2.4	14	2.3	1	0.9
50-59	27	3.8	19	3.2	8	8.3
60-69	27	5.7	19	4.7	6	11.0
70 and older	30	5.5	26	5.4	4	7.2

*Rate per 100,000 age, gender, and race-specific population.

Table 17: Age- and Race-Specific Cervical Cancer Incidence Rates, Michigan 2007

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
20-29	31	4.7	28	5.3	1	0.9
30-39	98	15.2	79	15.8	15	13.5
40-49	111	14.4	90	14.1	21	19.3
50-59	61	8.7	46	7.8	14	14.8
60-69	52	11.5	33	8.4	18	34.8
70 and older	59	10.8	46	9.5	11	19.9

*Rate per 100,000 age, gender, and race-specific population.

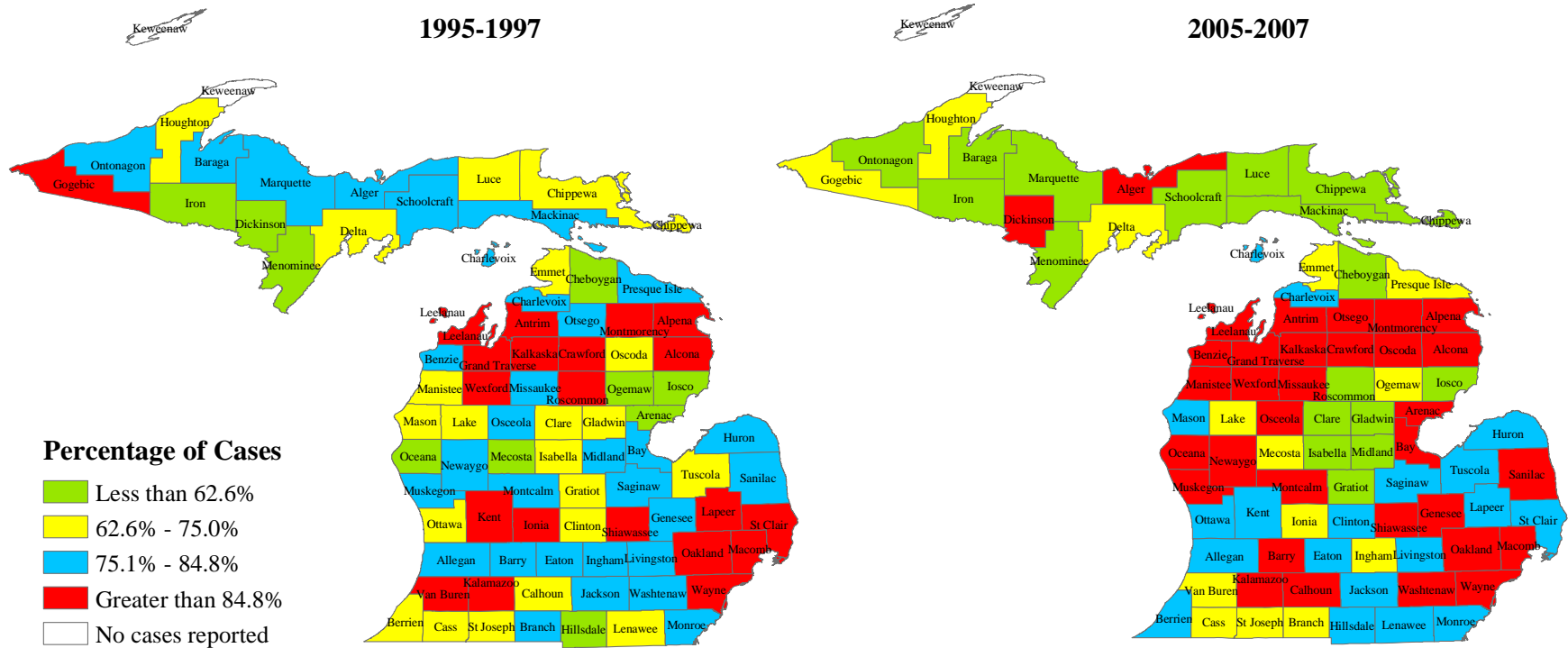
Table 18: Cervical Cancer Five-Year Relative Survival Rates by Stage at Diagnosis, Age and Race, US 2001-2007

	All Races	White	Black
All stages	68.6	70.0	58.4
Localized	90.9	92.1	83.1
Regional	57.0	58.0	51.9
Distant	18.7	19.8	13.3
Unknown	53.7	53.0	51.9

Table 19: Numbers and Percentages of Invasive Cervical Cancer (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	412	198	48.1	140	33.9	34	8.3	40	9.7
Whites	322	158	49.1	110	34.2	22	6.8	32	9.9
Blacks	80	32	40.0	29	36.2	12	15.0	7	8.8

Figure 2: Percentage of Cervical Cancer Cases In-situ at Diagnosis by County



Colorectal Cancer

Table 20: Estimated Number of Colorectal Cancer Deaths and New Colorectal Cancer Cases, Michigan 2011

Deaths	1,670
New Cases*	4,800

*Excludes in situ carcinomas.

Note: Numbers are rounded to the nearest 10.

Table 21: Colorectal Cancer Mortality Rates by Gender and Race, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	1,820	16.7	16.7
All Males	901	19.6	20.1
White Males	747	18.4	19.5
Black Males	135	29.4	29.1
All Females	919	14.4	14.2
White Females	769	13.7	13.7
Black Females	127	18.5	19.7

*Rate per 100,000 gender and race specific population.

Table 22: Colorectal Cancer Incidence Rates by Gender and Race, Michigan vs. US, 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	5,056	47.0	44.7
All Males	2,524	53.6	50.9
White Males	2,127	51.5	49.9
Black Males	329	66.7	60.8
All Females	2,531	41.9	39.6
White Females	2,109	40.1	38.7
Black Females	368	53.8	49.6

*Rate per 100,000 gender and race specific population.

Table 23: Age- and Gender-Specific Colorectal Cancer Mortality Rates, Michigan 2008

Age (Years)	Total		Males		Females	
	Number	Rate*	Number	Rate*	Number	Rate*
20-29	7	0.5	2	0.3	5	0.8
30-39	20	1.6	16	2.5	4	0.6
40-49	96	6.4	51	6.9	45	6.0
50-59	238	16.9	133	19.2	105	14.7
60-69	322	35.5	189	43.5	133	28.2
70 and over	1,137	124.1	510	137.8	627	114.8

*Rate per 100,000 age and gender-specific population.

Table 24: Age- and Gender-Specific Colorectal Cancer Incidence Rates, Michigan 2007

Age (Years)	Total		Males		Females	
	Number	Rate*	Number	Rate*	Number	Rate*
20-29	18	1.3	7	1.0	11	1.7
30-39	72	5.6	43	6.6	29	4.5
40-49	382	24.9	191	25.1	191	24.8
50-59	932	67.3	495	72.7	437	62.1
60-69	1,077	124.2	594	143.0	483	106.8
70 and over	2,571	281.4	1,193	324.7	1,377	252.1

*Rate per 100,000 age and gender-specific population.

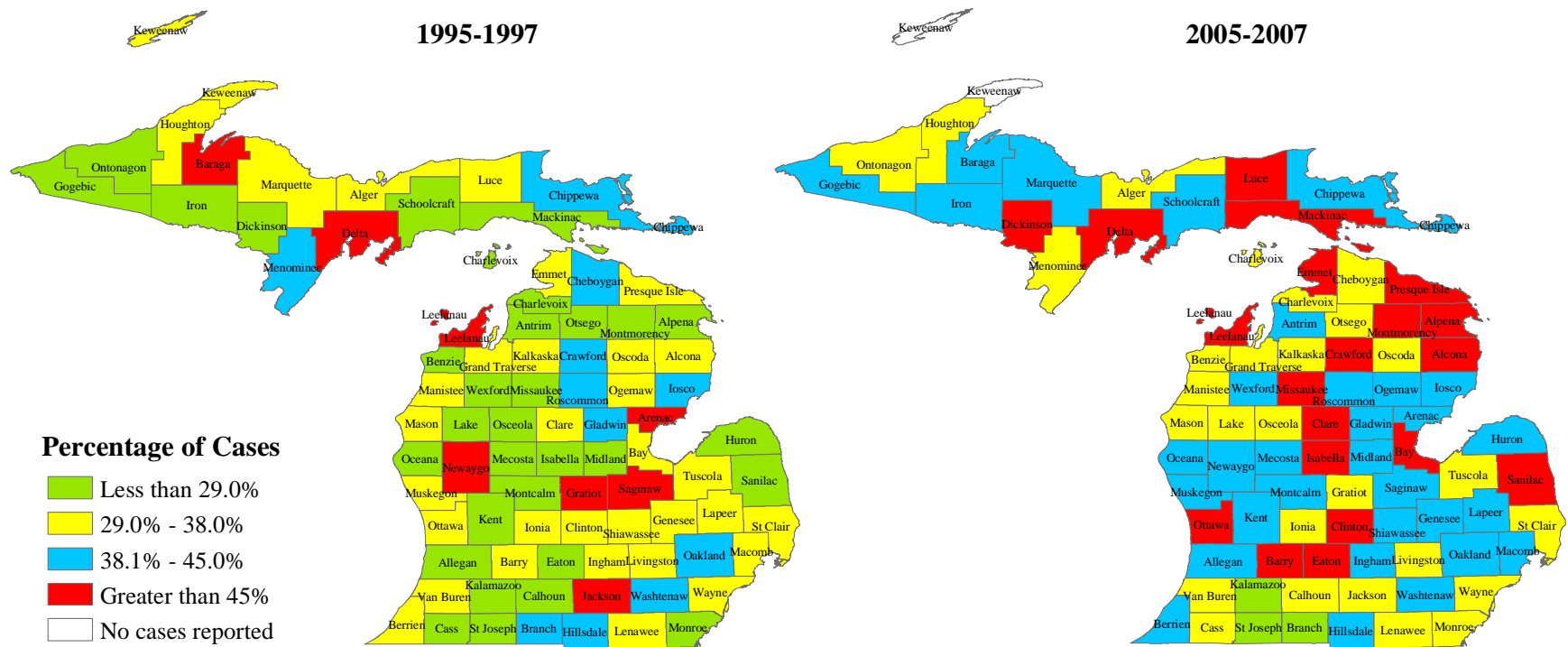
Table 25: Colorectal Cancer Five-Year Relative Survival Rates by Stage at Diagnosis, Race and Gender, US 2001-2007

	All Races			White			Black		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
All stages	64.3	64.6	64.0	65.0	65.5	64.5	56.0	55.0	56.9
Localized	90.1	90.1	90.0	90.6	90.7	90.4	85.1	83.2	86.6
Regional	69.2	69.1	69.4	69.7	69.7	69.7	63.5	62.8	64.0
Distant	11.7	11.1	12.3	12.1	11.5	12.8	8.5	7.8	9.0
Unknown	33.3	36.8	30.3	31.4	35.0	28.3	33.8	35.1	32.6

Table 26: Numbers and Percentages of Invasive Colorectal Cancer (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	5,056	2,058	40.7	1,646	32.6	890	17.6	462	9.1
Whites	4,237	1,734	40.9	1,412	33.3	695	16.4	396	9.4
Blacks	697	267	38.3	211	30.3	168	24.1	51	7.3

Figure 3: Percentage of Colorectal Cancer Cases Localized at Diagnosis by County



Lung Cancer

Table 27: Estimated Number of Lung Cancer Deaths and New Lung Cancer Cases, Michigan 2011

Deaths	5,830
New Cases*	8,140

*Excludes in situ carcinomas.

Note: Numbers are rounded to the nearest 10.

Table 28: Lung Cancer Mortality Rates by Gender and Race, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	5,883	54.5	50.7
All Males	3,229	68.6	65.2
White Males	2,747	66.3	64.8
Black Males	430	88.8	82.8
All Females	2,654	44.2	40.0
White Females	2,298	44.0	41.1
Black Females	316	46.9	38.3

*Rate per 100,000 gender and race-specific population.

Table 29: Lung Cancer Incidence Rates by Gender and Race, Michigan vs. US, 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	7,712	72.4	59.3
All Males	4,023	85.9	69.9
White Males	3,454	83.8	69.1
Black Males	511	106.6	93.5
All Females	3,687	63.0	51.6
White Females	3,178	62.5	54.1
Black Females	459	68.0	53.4

*Rate per 100,000 gender and race-specific population.

Table 30: Age- and Gender-Specific Lung Cancer Mortality Rates, Michigan 2008

	Total		Males		Females	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39 Years	20	1.0	12	1.2	8	0.8
40-49 Years	241	16.2	131	17.7	110	14.7
50-64 Years	1,520	78.9	880	93.3	640	65.1
65 Years and Over	4,100	314.3	2,204	397.9	1,896	252.6

*Rate per 100,000 age and gender-specific population.

Table 31: Age- and Gender-Specific Lung Cancer Incidence Rates, Michigan 2007

	Total		Males		Females	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39 Years	31	1.6	8	0.8	23	2.4
40-49 Years	386	25.2	172	22.6	214	27.8
50-64 Years	2,167	114.9	1,170	126.7	996	103.5
65 Years and Over	5,122	400.1	2,670	494.1	2,451	331.3

*Rate per 100,000 age and gender-specific population.

Table 32: Lung Cancer Five-Year Relative Survival Rates by Stage at Diagnosis, Race and Gender, US 2001-2007

	All Races			Whites			Blacks		
	Both Sexes	Males	Females	Both Sexes	Males	Females	Both Sexes	Males	Females
All stages	15.6	13.5	18.0	15.9	13.7	18.3	12.9	11.6	14.5
Localized	52.0	47.2	56.5	52.7	48.0	57.0	43.7	39.5	48.3
Regional	24.2	22.0	26.9	24.2	24.0	26.8	22.4	21.2	24.0
Distant	3.6	3.0	4.2	3.5	2.9	4.1	3.4	3.3	3.6
Unknown	8.1	7.1	9.2	7.7	6.5	8.9	10.3	9.8	11.0

Table 33: Numbers and Percentages of Invasive Lung Cancer Cases (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	7,712	1,426	18.5	1,741	22.5	3,785	49.1	760	9.9
Whites	6,633	1,262	19.0	1,496	22.6	3,171	47.8	704	10.6
Blacks	970	146	15.1	217	22.4	562	57.9	45	4.6

Prostate Cancer

Table 34: Estimated Number of Prostate Cancer Deaths and New Prostate Cancer Cases, Michigan 2011

Deaths	1,150
New Cases*	8,940

*Excludes in situ carcinomas.

Note: Numbers are rounded to the nearest 10.

Table 35: Prostate Cancer Mortality Rates by Race, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	922	21.9	23.5
Whites	742	19.8	21.6
Blacks	170	42.6	52.0

*Rate per 100,000 race and gender-specific population.

Table 36: Prostate Cancer Incidence Rates by Race, Michigan vs. US 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	8,345	168.7	165.8
Whites	6,552	150.5	159.3
Blacks	1,136	227.1	241.2

*Rate per 100,000 race and gender-specific population.

Table 37: Age- and Race-Specific Prostate Cancer Mortality Rates, Michigan 2008

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	0	0.0	0	0.0	0	0.0
40-49	1	0.1	0	0.0	1	1.1
50-64	85	9.0	57	7.0	27	26.0
65 and Older	836	150.9	685	138.5	142	285.1

*Rate per 100,000 age, gender, and race-specific population.

Table 38: Age- and Race-Specific Prostate Cancer Incidence Rates, Michigan 2007

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	6	0.6	3	0.4	2	1.3
40-49	284	37.3	180	28.0	81	86.9
50-64	3,307	358.2	2,548	318.3	510	501.8
65 and Older	4,747	878.5	3,820	791.9	543	1107.7

*Rate per 100,000 age, gender, and race-specific population.

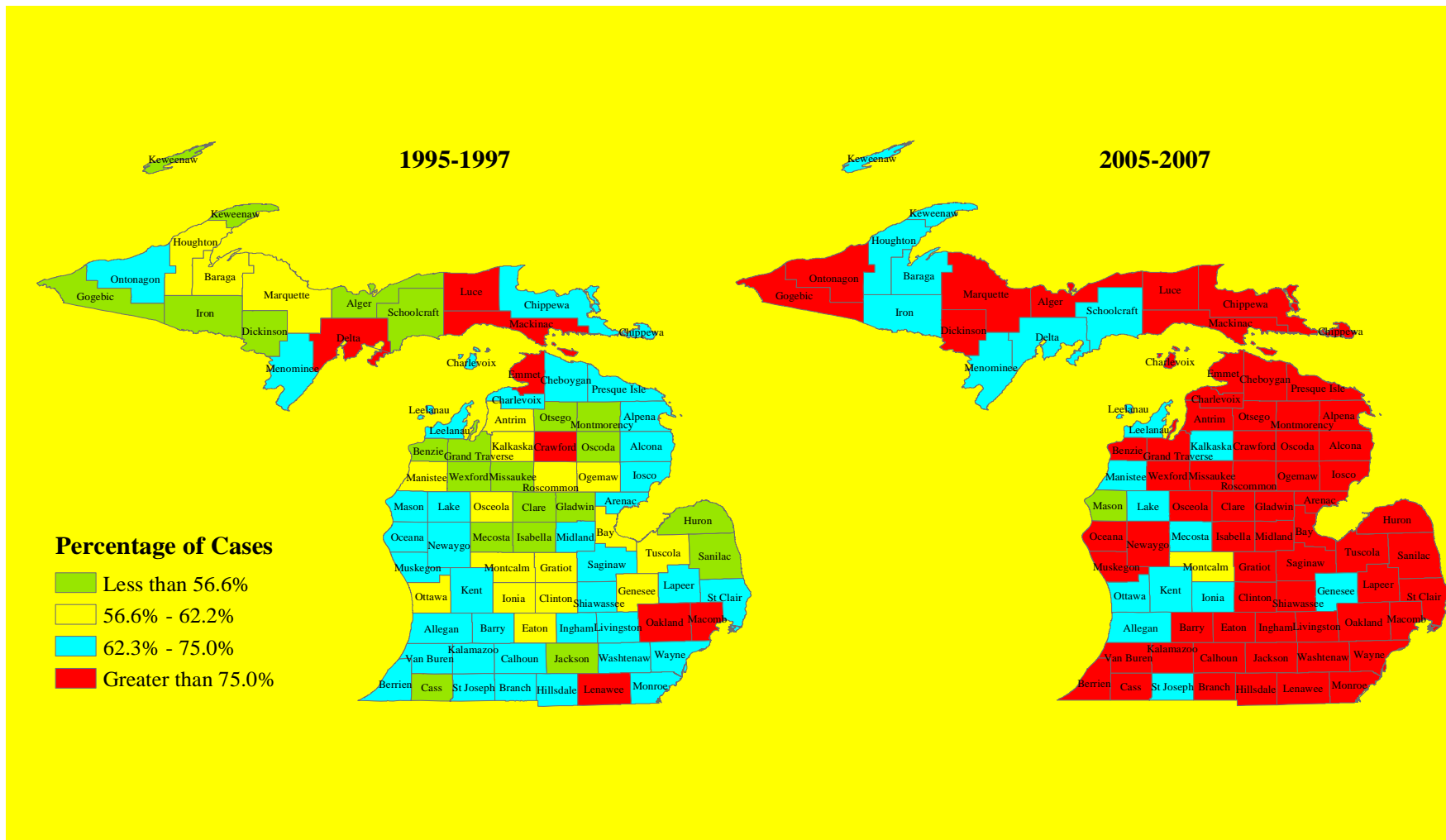
Table 39: Prostate Cancer Five-Year Relative Survival Rates by Stage at Diagnosis and Race, US 2001-2007

	All Races	White	Black
All stages	99.4	99.7	96.2
Localized	100.0	100.0	100.0
Regional	100.0	100.0	100.0
Distant	28.8	28.2	28.2
Unknown	69.9	68.8	58.8

Table 40: Numbers and Percentages of Invasive Prostate Cancer (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	8,345	6,897	82.7	754	9.0	200	2.4	494	5.9
Whites	6,552	5,395	82.3	589	9.0	142	2.2	426	6.5
Blacks	1,136	925	81.4	118	10.4	57	5.0	36	3.2

Figure 4: Percentage of Prostate Cancer Cases Localized at Diagnosis by County



Ovarian Cancer

Table 41: Estimated Number of Ovarian Cancer Deaths, Michigan 2011

Deaths	560
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Note: Numbers are rounded to the nearest 10.

Table 42: Ovarian Cancer Mortality Rates by Race, Michigan 2008 vs. US 2007

	Number in Michigan (2008)	Age-Adjusted Rate*	
		Michigan (2008)	US-SEER (2007)
Total	479	8.0	8.2
Whites	433	8.3	8.6
Blacks	41	6.0	6.6

*Rate per 100,000 race and gender-specific population.

Table 43: Ovarian Cancer Incidence Rates by Race, Michigan vs. US 2007

	Number in Michigan	Age-Adjusted Rate*	
		Michigan	US-SEER
Total	759	13.2	12.5
Whites	662	13.4	13.0
Blacks	83	11.8	11.0

*Rate per 100,000 race and gender-specific population.

Table 44: Age- and Race-Specific Ovarian Cancer Mortality Rates, Michigan 2008

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	7	0.7	6	0.8	1	0.6
40-49	32	4.3	26	4.2	6	5.6
50-64	122	12.4	111	13.4	10	7.8
65 and Older	316	42.1	288	43.5	24	30.9

*Rate per 100,000 age, gender, and race-specific population.

Table 45: Age- and Race-Specific Female Ovarian Cancer Incidence Rates, Michigan 2007

Age (Years)	Total (All Races)		White		Black	
	Number	Rate*	Number	Rate*	Number	Rate*
25-39	42	4.3	34	4.5	5	3.0
40-49	97	12.6	79	12.4	15	13.8
50-64	257	26.7	232	28.5	23	18.4
65 and Older	347	46.9	308	47.2	33	43.1

*Rate per 100,000 age, gender, and race-specific population.

Table 46: Ovarian Cancer Five-Year Relative Survival Rates by Stage at Diagnosis and Race, US 2001-2007

	All Races	White	Black
All stages	43.8	43.7	34.9
Localized	92.4	92.4	89.1
Regional	71.7	72.8	57.2
Distant	27.2	27.7	18.9
Unknown	22.4	21.1	25.6

Table 47: Numbers and Percentages of Ovarian Cancer (Primary Site) by Stage at Diagnosis and Race, Michigan 2007

	Total Number	Localized		Regional		Distant		Unknown	
		Number	%	Number	%	Number	%	Number	%
Total	759	136	17.9	151	19.9	401	52.8	71	9.4
Whites	662	113	17.1	136	20.5	354	53.5	59	8.9
Blacks	83	18	21.7	13	15.7	41	49.4	11	13.2