

Comparisons 2002-2006 and 2005-2009

Cancer Incidence and Mortality rates from 2005-2009 were compared to previously calculated rates from 2002-2006. (See **Table 2a** and **2b**). It is important to note that rates indicated as "above" the 2002-2006 rates do not necessarily indicate that there is an unusual or unexpected increase in the number of cases in the community. Standardized incidence ratios (SIR) and associated 95% confidence intervals are used to help make this determination (See Methods and Limitations Section for more information).

Incidence

Cuyahoga County

- In Cuyahoga County, the 2005-2009 incidence rates for the following cancers were **above** the rates for 2002-2006; brain and other CNS, cervix, Hodgkin's lymphoma, pancreas, and thyroid.
 - Cervical cancer, Hodgkin's lymphoma, and pancreatic cancer have significantly **higher** numbers of cases than expected for the time period 2005-2009.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **higher** numbers of cases than expected; all site/types, bladder, corpus uterus, esophagus, larynx, and lung and bronchus.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **lower** numbers of cases than expected; liver and intrahepatic bile duct and melanoma of the skin.

City of Cleveland

- In the City of Cleveland, the 2005-2009 incidence rates for the following cancers were **above** the rates for 2002-2006; bladder, cervix, corpus uterine, leukemia, liver and intrahepatic bile duct, melanoma of the skin, multiple myeloma, pancreas, and thyroid.
 - Cervical cancer, corpus uterine cancer, liver and intrahepatic bile duct cancer, multiple myeloma, pancreatic cancer, and thyroid cancer have significantly **higher** numbers of cases than expected for the time period 2005-2009.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **higher** numbers of cases than expected; all sites/types, colon and rectum, esophagus, larynx, lung and bronchus, oral cavity and pharynx, and stomach.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **lower** numbers of cases than expected; Non-Hodgkin's lymphoma and testicular cancer.
- Thyroid cancer rates for 2005-2009 were **above** the 2002-2006 rates for the City of Cleveland, First Ring Suburbs, Outer Ring Suburbs and Cuyahoga County. However, there were not significantly higher numbers of cases than expected for 2005-2009 in these areas.

Table 2a

Cancer Incidence Rates by Place with comparisons for years 2002-2006 and 2005-2009¹						
	All Sites			Bladder		
	2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below	2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below
Cleveland	483.9	531.0	similar	16.7	19.7	above
First Ring	449.3	471.0	similar	21.0	22.6	similar
Outer Ring	462.6	454.2	similar	24.0	23.7	similar
Cuyahoga County	477.1	488.4	similar	21.5	22.8	similar
	Brain and other CNS			Breast (Female)		
Cleveland	4.7	5.5	similar	113.3	118.9	similar
First Ring	5.3	6.1	similar	116.2	129.0	above
Outer Ring	6.8	7.3	similar	127.8	128.7	similar
Cuyahoga County	5.8	6.4	above	122.2	127.7	similar
	Cervix			Colon and Rectum		
Cleveland	11.4	15.2	above	55.0	60.0	similar
First Ring	6.6	7.4	similar	49.7	44.4	below
Outer Ring	5.7	5.6	similar	45.7	40.7	below
Cuyahoga County	8.0	9.3	above	51.1	47.8	similar
	Corpus Uterus			Esophagus		
Cleveland	26.1	32.9	above	6.0	6.4	similar
First Ring	29.9	31.8	similar	5.4	5.1	similar
Outer Ring	30.3	30.1	similar	5.4	4.4	below
Cuyahoga County	29.9	31.9	similar	5.7	5.2	similar
	Hodgkin's Lymphoma			Kidney and Renal Pelvis		
Cleveland	3.3	3.1	similar	14.7	16.2	similar
First Ring	2.2	3.1	above	13.1	14.7	above
Outer Ring	2.9	4.5	above	13.9	14.1	similar
Cuyahoga County	2.9	3.6	above	14.1	15.2	similar
	Larynx			Leukemia		
Cleveland	7.2	7.4	similar	9.1	11.0	above
First Ring	3.7	3.4	similar	12.4	12.6	similar
Outer Ring	3.4	2.6	below	12.7	11.5	similar
Cuyahoga County	4.7	4.3	similar	11.8	12.0	similar
	Liver and Intrahepatic Bile Duct			Lung and Bronchus		
Cleveland	8.1	10.1	above	93.6	99.6	similar
First Ring	4.7	5.0	similar	61.2	67.7	above
Outer Ring	3.7	3.9	similar	56.9	55.5	similar
Cuyahoga County	5.6	6.1	similar	70.7	72.3	similar
	Melanoma of the Skin			Multiple Myeloma		
Cleveland	6.1	8.0	above	6.5	8.1	above
First Ring	15.4	16.6	similar	5.7	5.5	similar
Outer Ring	21.6	21.9	similar	5.3	4.8	similar
Cuyahoga County	15.3	16.6	similar	6.0	6.1	similar
	Non-Hodgkin's Lymphoma			Oral Cavity and Pharynx		
Cleveland	15.7	17.3	similar	13.3	14.5	similar
First Ring	18.4	18.1	similar	9.1	8.8	similar
Outer Ring	20.7	20.3	similar	8.9	9.3	similar
Cuyahoga County	19.1	19.3	similar	10.4	10.6	similar

See page 3 for details on how comparisons were determined.

Table 2a (continued)

Cancer Incidence Rates by Place with comparisons for years 2002-2006 and 2005-2009 (continued)						
	Ovary			Pancreas		
	2002-2006 Rate	2005-2009 Rate	Similar/Above/Below	2002-2006 Rate	2005-2009 Rate	Similar/Above/Below
Cleveland	11.0	12.9	similar	12.1	15.8	above
First Ring	11.7	13.4	similar	12.4	14.0	above
Outer Ring	13.0	11.7	similar	11.3	11.6	similar
Cuyahoga County	12.3	12.9	similar	12.3	13.8	above
	Prostate			Stomach		
Cleveland	150.7	153.2	similar	9.3	10.4	similar
First Ring	151.9	153.9	similar	7.5	7.1	similar
Outer Ring	153.4	146.7	similar	7.2	6.1	below
Cuyahoga County	157.5	153.7	similar	8.1	7.7	similar
	Testis			Thyroid		
Cleveland	3.0	4.0	similar	5.6	8.7	above
First Ring	5.2	7.1	above	8.0	9.8	above
Outer Ring	6.0	5.6	similar	9.4	12.4	above
Cuyahoga County	4.9	5.6	similar	7.9	10.6	above

¹**Above**--The current rate was determined to be "above" the previous rate, when the 95% confidence interval of the current rate did not include the previous rate and the rate ratio was >1.10.

Similar--The current rate was determined to be "similar" to the previous rate, when the rate ratio was between 0.90 and 1.10.

Below--The current rate was determined to be "below" the previous rate, when the 95% confidence interval of the current rate did not include the previous rate, and the rate ratio is <0.90.

Comparisons 2002-2006 and 2005-2009 (continued)

Mortality

Cuyahoga County

- In Cuyahoga County, the mortality rate for 2005-2009 for melanoma of the skin was **above** the rate for 2002-2006; however, there was **not** a significantly higher number of cases than expected for 2005-2009.
- The following cancers had mortality rates for 2005-2009 that were **below** the rates for 2002-2006; colon and rectum, Non-Hodgkin's lymphoma, and ovarian cancer. Ovarian cancer was the only one of these cancers that had a significantly **lower** than expected number of cases.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **higher** numbers of cases than expected; all site/types, bladder, breast (female), corpus uterus, esophagus, larynx, lung and bronchus, multiple myeloma, oral cavity and pharynx, pancreas, and stomach. .
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **lower** numbers of cases than expected; brain and other CNS and prostate cancer.

City of Cleveland

- In the City of Cleveland, the 2005-2009 mortality rates for the following cancers were **above** the rates for 2002-2006; bladder, colon and rectum, corpus uterine, kidney and renal pelvis, melanoma of the skin, and pancreas.
 - Bladder cancer, colon and rectum, corpus uterine cancer, kidney and renal pelvis, and pancreatic cancer have significantly **higher** numbers of cases than expected for the time period 2005-2009.
 - The following cancers had similar rates from 2002-2006 and 2005-2009, but had significantly **higher** numbers of cases than expected; all site/types, breast (female), cervix, esophagus, larynx, liver and intrahepatic bile duct, lung and bronchus, multiple myeloma, oral cavity and pharynx, and stomach.
 - The mortality rate for brain and other CNS cancers was similar between 2002-2006 and 2005-2009, but had a significantly **lower** number of cases than expected.

Table 2b

Cancer Mortality Rates by Place with comparisons for years 2002-2006 and 2005-2009¹							
	All Sites				Bladder		
	2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below		2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below
Cleveland	242.8	262.0	similar		4.9	6.2	above
First Ring	191.2	188.6	similar		5.1	5.1	similar
Outer Ring	179.4	154.5	below		5.0	4.7	similar
Cuyahoga County	204.3	196.3	similar		5.1	5.3	similar
	Brain and other CNS				Breast (Female)		
Cleveland	3.2	3.3	similar		32.0	30.2	similar
First Ring	4.2	3.6	similar		26.4	26.4	similar
Outer Ring	4.6	4.4	similar		24.2	22.3	similar
Cuyahoga County	4.1	3.8	similar		27.5	26.2	similar
	Cervix				Colon and Rectum		
Cleveland	3.1	4.3	similar		21.8	24.4	above
First Ring	2.0	2.0	similar		19.1	15.6	below
Outer Ring	1.4	1.4	similar		17.8	13.1	below
Cuyahoga County	2.2	2.5	similar		19.7	17.2	below
	Corpus Uterus				Esophagus		
Cleveland	5.9	9.2	above		5.6	5.7	similar
First Ring	5.5	5.8	similar		4.6	4.6	similar
Outer Ring	5.0	4.0	similar		4.8	4.3	similar
Cuyahoga County	5.5	6.1	similar		5.0	4.9	similar
	Hodgkin's Lymphoma				Kidney and Renal Pelvis		
Cleveland	0.6	0.4	similar		4.5	5.8	above
First Ring	0.6	0.5	similar		4.2	3.8	similar
Outer Ring	0.6	0.7	similar		3.6	3.1	similar
Cuyahoga County	0.6	0.5	similar		4.1	4.0	similar
	Larynx				Leukemia		
Cleveland	3.0	3.4	similar		6.2	6.6	similar
First Ring	1.5	1.5	similar		8.2	8.6	similar
Outer Ring	0.8	0.7	similar		8.2	6.6	below
Cuyahoga County	1.7	1.7	similar		7.7	7.3	similar
	Liver and Intrahepatic Bile Duct				Lung and Bronchus		
Cleveland	8.5	9.3	similar		76.3	81.0	similar
First Ring	4.1	4.4	similar		48.0	50.1	similar
Outer Ring	4.4	4.1	similar		44.3	37.9	below
Cuyahoga County	5.5	5.7	similar		55.5	54.0	similar
	Melanoma of the Skin				Multiple Myeloma		
Cleveland	1.0	1.6	above		4.9	4.9	similar
First Ring	2.0	2.5	similar		4.6	4.0	similar
Outer Ring	2.1	2.3	similar		3.9	3.5	similar
Cuyahoga County	1.8	2.2	above		4.4	4.1	similar
	Non-Hodgkin's Lymphoma				Oral Cavity and Pharynx		
Cleveland	6.4	6.4	similar		5.1	5.6	similar
First Ring	7.1	6.7	similar		2.5	2.6	similar
Outer Ring	7.6	6.3	below		2.0	1.6	similar
Cuyahoga County	7.2	6.6	similar		3.1	3.0	similar

See page 6 for details on how comparisons were determined.

Table 2b (continued)

Cancer Mortality Rates by Place with comparisons for years 2002-2006 and 2005-2009 (continued)							
	Ovary				Pancreas		
	2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below		2002-2006 Rate	2005-2009 Rate	Similar/ Above/ Below
Cleveland	7.2	8.0	similar		12.6	15.5	above
First Ring	8.2	7.5	similar		10.8	12.5	above
Outer Ring	9.7	6.4	below		11.4	10.6	similar
Cuyahoga County	8.7	7.3	below		11.7	12.7	similar
	Prostate				Stomach		
Cleveland	43.8	44.7	similar		5.8	6.6	similar
First Ring	30.8	29.8	similar		4.6	4.6	similar
Outer Ring	28.5	23.2	below		4.0	3.8	similar
Cuyahoga County	33.7	30.6	similar		4.8	4.8	similar
	Testis				Thyroid		
Cleveland	*	*	Data not sufficient		0.3	0.3	similar
First Ring	*	*	Data not sufficient		0.6	0.6	similar
Outer Ring	*	*	Data not sufficient		0.5	0.5	similar
Cuyahoga County	0.2	0.3	similar		0.5	0.5	similar

¹**Above**--The current rate was determined to be "above" the previous rate, when the 95% confidence interval of the current rate did not include the previous rate and the rate ratio was >1.10.

Similar--The current rate was determined to be "similar" to the previous rate, when the rate ratio was between 0.90 and 1.10.

Below--The current rate was determined to be "below" the previous rate, when the 95% confidence interval of the current rate did not include the previous rate, and the rate ratio is <0.90.