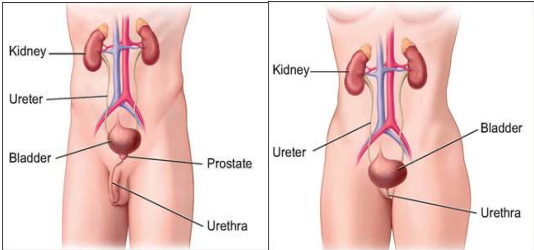


Kidney and Renal Pelvis Cancers

Figure 10



Definition: Kidney and renal pelvis cancers form in the tissue of the kidney.¹ This includes cancers that can form in the lining of the small tubes that filter blood and remove waste products.²

Background: From 2002 to 2006, there was a yearly average of approximately **1,731** newly diagnosed cases of kidney and renal pelvis cancers in Ohio.³ During this same time period, Ohio experienced approximately **555** deaths each year due to kidney and renal pelvis cancers.³

Kidney cancer usually develops in people over the age of 40, with 64 being the average age of diagnosis.¹ Kidney cancers are among the 10 most common cancers in both men and women.¹ The rate of people developing this cancer has risen slowly since the 1970s; however, the death rate has been declining slightly since the late 1990s.¹

Cuyahoga County Data:

- The average annual number of newly diagnosed kidney and renal pelvis cancer cases from 2002-2006 was **220**, with an age-adjusted incidence rate of **14.1** per 100,000 people.
- This is **the same as** the **14.1** incidence rate for Ohio and **higher** than the **13.6** incidence rate for the Nation.
- The average annual number of kidney and renal pelvis cancers deaths from 2002-2006 was **68**, with an age-adjusted mortality rate of **4.1** per 100,000 people.
- This is **lower** than the **4.5** mortality rate for Ohio and **the same as** the **4.1** mortality rate for the Nation.

Table 10a Kidney and Renal Pelvis Cancers
Average Annual Number of Cancer Cases and Age-Adjusted Incidence Rates* for 2002-2006

Incidence	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	131	19.9	89	9.9	220	14.1
Ohio	1,011	18.5	720	10.7	1,731	14.1
National SEER		18.6		9.5		13.6

* Rate is calculated per 100,000 people.

Table 10b Kidney and Renal Pelvis Cancers
Average Annual Number of Cancer Deaths and Age-Adjusted Mortality Rates* for 2002-2006

Mortality	Male		Female		Total	
	Cases	Rate	Cases	Rate	Cases	Rate
Cuyahoga County	41	6.3	27	2.6	68	4.1
Ohio	334	6.4	222	3.1	555	4.5
National SEER		6.0		2.7		4.1

* Rate is calculated per 100,000 people.

Figure 10a

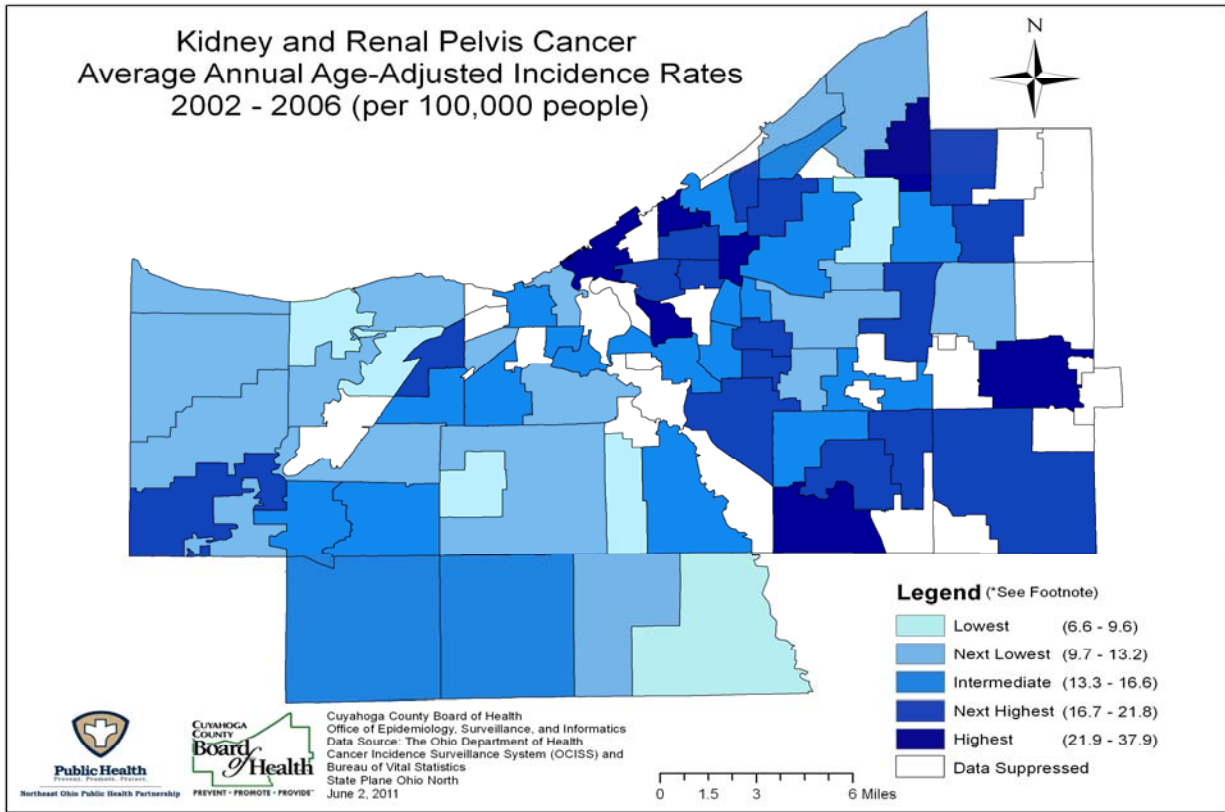
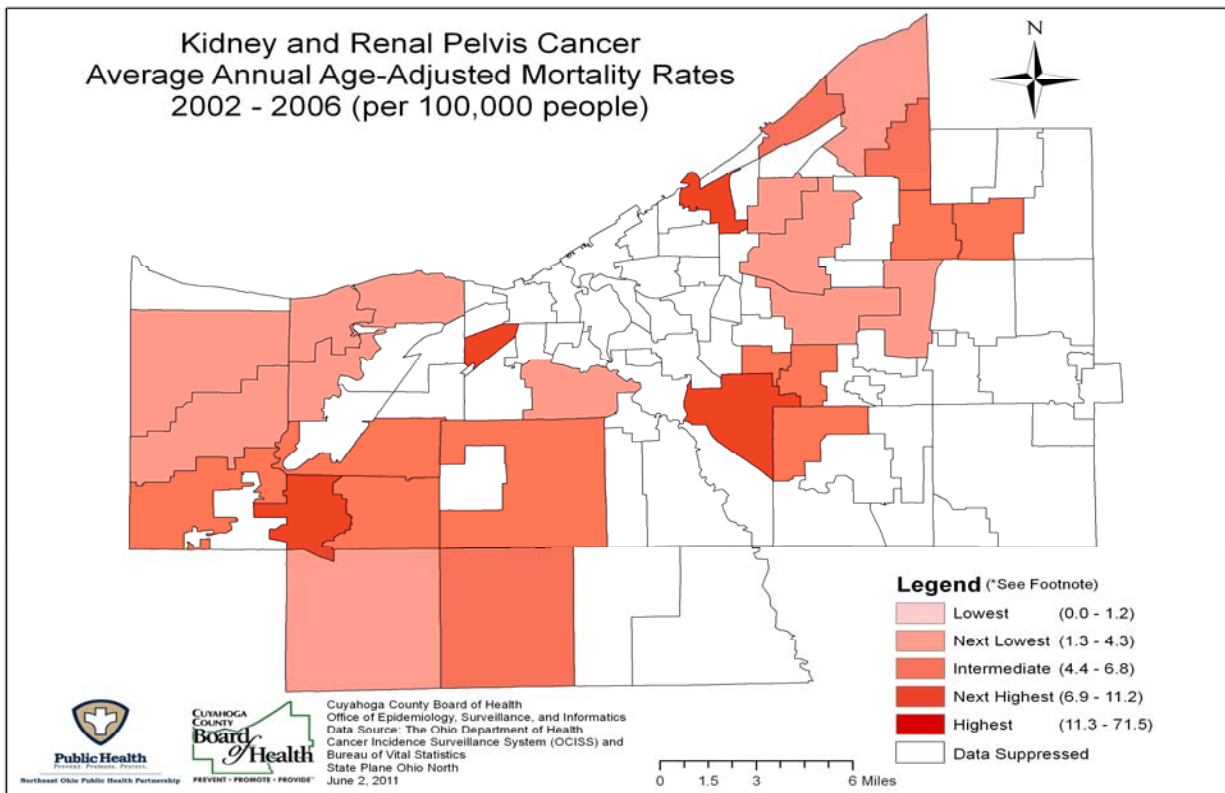


Figure 10b



*Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

Chart 10a

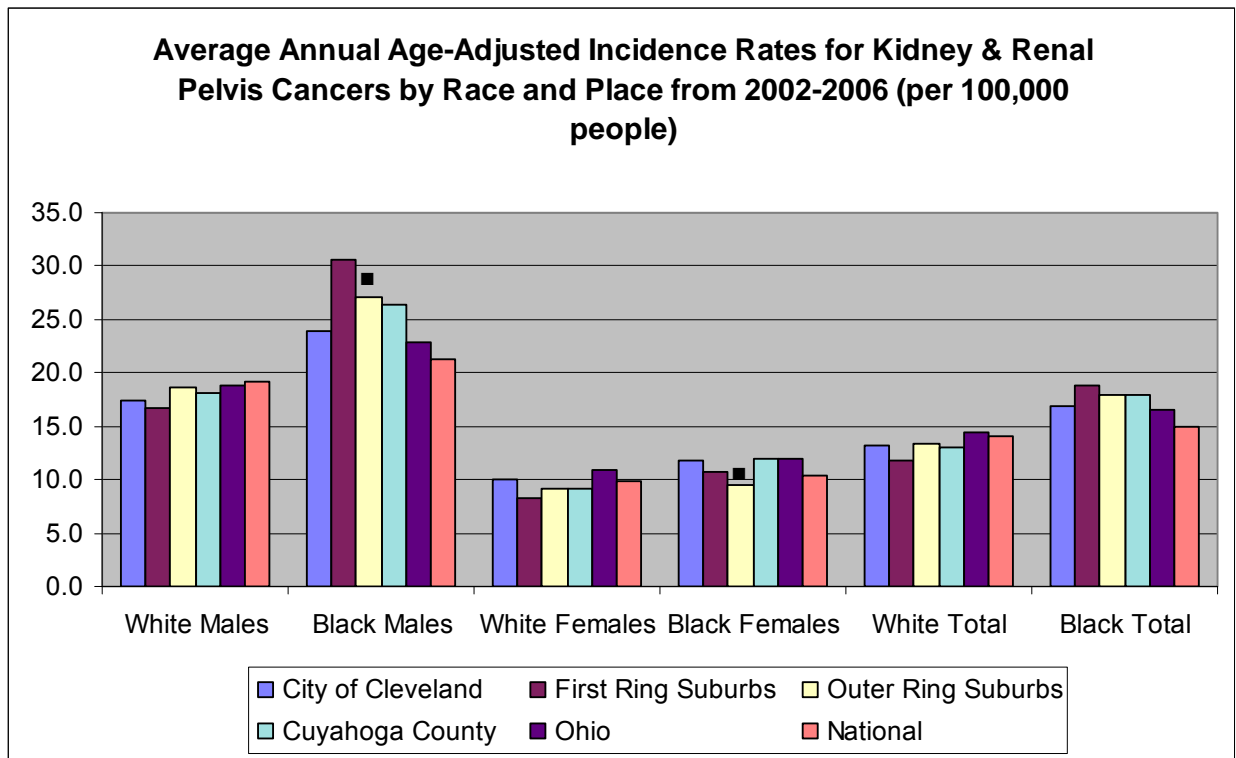
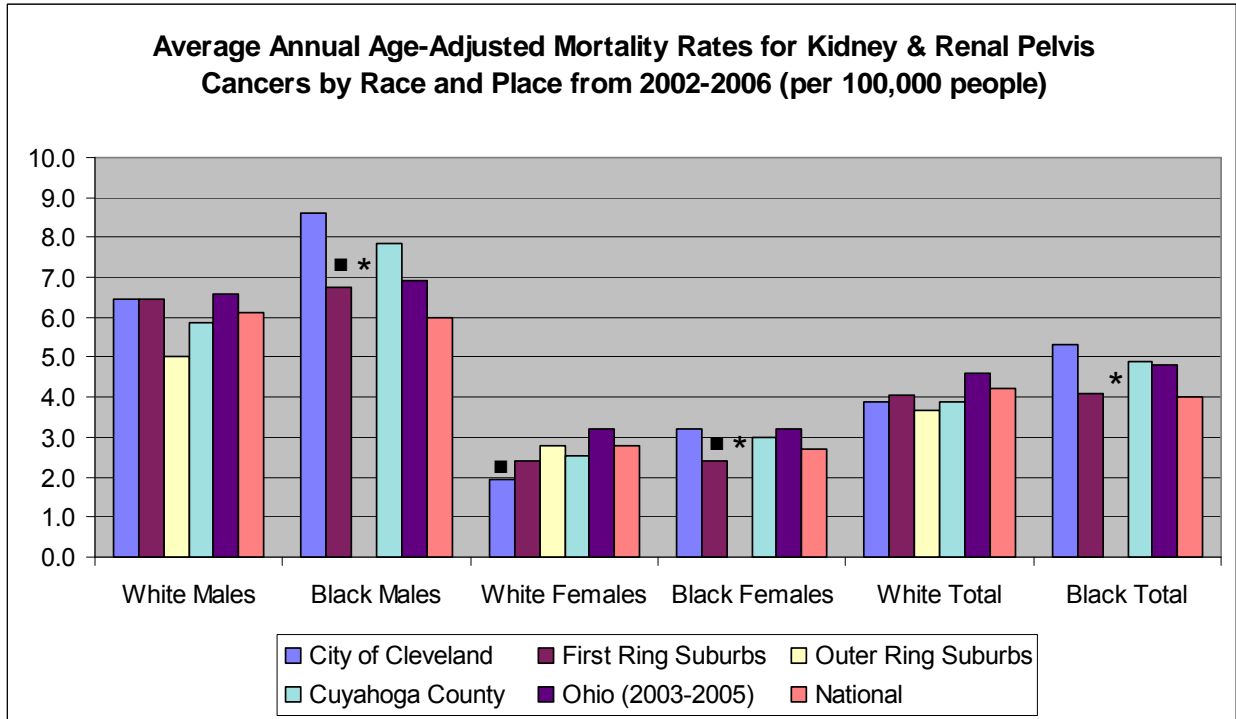


Chart 10b



▲ Rates are statistically significantly higher when compared to Cuyahoga County.
 ▼ Rates are statistically significantly lower when compared to Cuyahoga County.
 ■ Rates are not compared to Cuyahoga County when there are <20 cases total for 2002-2006 due to instability.
 *Data were suppressed to help maintain confidentiality and /or due to concerns over unstable numbers. See methods/limitations section for additional details.

Risk Factors

Males: In the United States, 1 in 53 males will develop kidney and renal pelvis cancers and 1 in 167 males will die from kidney and renal pelvis cancers.⁴

Females: In the United States, 1 in 88 females will develop kidney and renal pelvis cancers and 1 in 286 females will die from kidney and renal pelvis cancers.⁴

Several risk factors may contribute to the development of kidney and renal pelvis cancers. They include:¹

- **Smoking**
- **Obesity**
- **Workplace exposures**
- **Genetic and hereditary risk factors**
 - von Hippel-Lindau Disease
 - Hereditary papillary renal cell carcinoma
 - Hereditary leiomyoma-renal cell carcinoma
 - Birt-Hogg-Dube (BHD) syndrome
 - Hereditary renal oncocytoma
- **Family history of kidney cancer**
- **High blood pressure**
- **Certain medications**
 - Phenacetin
 - Diuretics
- **Advanced kidney disease**
- **Gender-** Renal cancers are twice as common in men than women.
- **Race-** African Americans have slightly higher rates of renal cancers.

Symptoms³

- Blood in the urine
- Pain in the side that does not go away
- A lump or mass in the side or the abdomen
- Weight Loss
- Fever
- Feeling very tired

Screening, Prevention and Early Detection¹

Screening:

Although there are no recommended screening tests for kidney cancer, a routine urinalysis (sometimes part of a medical checkup) may pick up blood in the urine which is sometimes found in people with early renal cell cancer. Physicians recommend imaging tests such as MRI

(Magnetic Resonance Imaging) or CT (Computed Tomography) scans for those who have inherited conditions that increase the risk for kidney cancer.

Prevention:

Most of the time, the cause of kidney and renal pelvis cancer is not known, and therefore it may not be preventable. Some ways to reduce risk of these cancers are by controlling blood pressure, reducing weight (if obese), refraining from smoking, exercising, and choosing a diet high in fruits and vegetables. Avoiding workplace exposures to large amounts of harmful substances (asbestos, organic solvents, and cadmium) can also reduce the risk of kidney and renal pelvis cancers.

Staging

Stage at Diagnosis describes the severity of a person's cancer and the extent to which it has or has not spread throughout the body.⁵ Cancer staging is important in helping physicians plan appropriate treatment, as well as to estimate a patient's prognosis.⁵ Cancer diagnosed in the *in situ* and localized stages are generally referred to as early-stage tumors, whereas regional and distant tumors are referred to as late-stage tumors.² Detecting cancers at an early stage may increase long-term survival and can lead to a reduction in mortality.²

The National Cancer Institute groups staging into five main categories:⁵

- ***In situ***: Abnormal cells are present only in the layer of cells in which they developed. In this report, *in situ* cases are only included for bladder cancer.
- **Localized**: Cancer is limited to the organ in which it began, without evidence of spread.
- **Regional**: Cancer has spread beyond the primary site to nearby lymph nodes or organs and tissues.
- **Distant**: Cancer has spread from the primary site to distant organs or distant lymph nodes.
- **Unstaged/Unknown**: There is not enough information to determine the stage.

Chart 10c

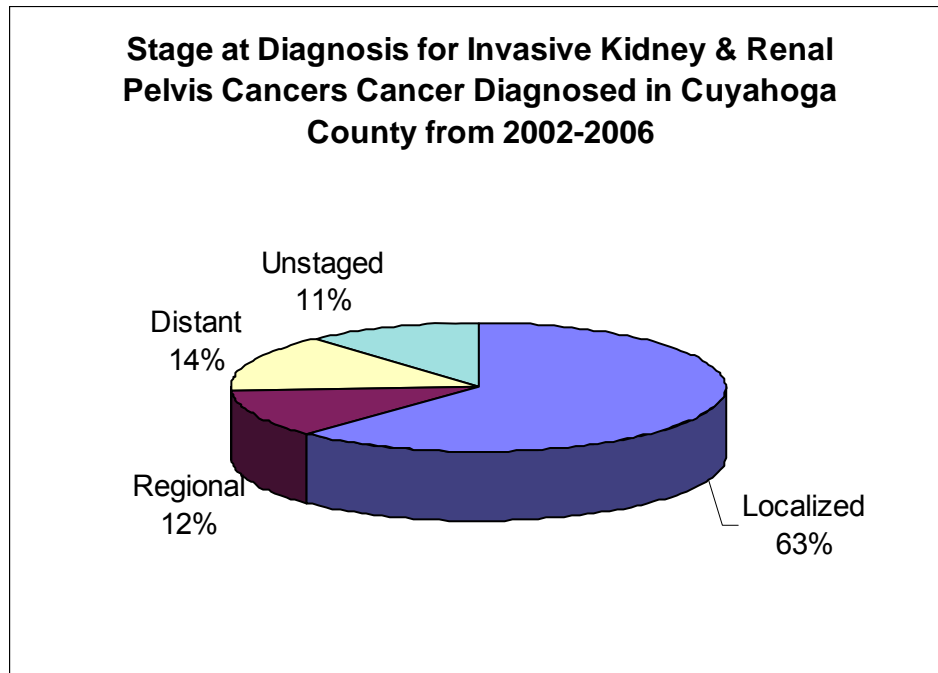


Table 10c

5-year Relative Survival* by Stage at Diagnosis for Kidney and Renal Pelvis Cancer in the United States for 1999-2006, All Races, Both Sexes⁶

Stage at Diagnosis	5-year Relative Survival (%)
Localized (confined to primary site)	90.3
Regional (spread to regional lymph nodes)	62.7
Distant (cancer has metastasized)	10.6
Unknown/Unstaged	37.8

*Relative survival compares observed survival for those with cancer to the expected survival for those without cancer.

More Information

National Cancer Institute <http://www.cancer.gov/>

American Cancer Society <http://www.cancer.org>

Ohio Department of Health <http://www.odh.ohio.gov/>

Resources

1. The American Cancer Society. Kidney Cancer Detailed Guide. <http://www.cancer.org/Cancer/KidneyCancer/DetailedGuide/index>. (Accessed December 14, 2010).
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3. *Cancer Incidence and Mortality among Ohio Residents, 2002-2006*. Ohio Cancer Incidence Surveillance System, Ohio Department of Health and The Ohio State University, Columbus, Ohio, December 2009. http://www.odh.ohio.gov/ASSETS/79F9E92E210F477D885F8EAC864E2F27/0206Monograph_Final.pdf.
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7. National Cancer Institute. What you need to know about bladder cancer. Bladder images from <http://www.cancer.gov/cancertopics/wyntk/bladder/page2>. (Accessed December 14, 2010).

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