

## What is kidney cancer?

Kidney cancer is a malignant tumor that develops from the cells of the kidney. It accounts for only about 2% of all cancers in the U.S. There are three main types of kidney cancer: renal cell carcinoma, which arises in the part of the kidney that filters blood and produces urine (the renal parenchyma); transitional cell carcinoma, which arises in the area of the kidney where urine collects and drains (the renal pelvis); and Wilms' Tumor (nephroblastoma), which may arise in embryonic cells in the kidney. About 70% of kidney cancers are renal cell carcinomas. Wilms' Tumor occurs mostly in children under the age of 5 and has a strong genetic link.

## What are the early signs of kidney cancer?

Some of the warning signs of kidney cancer include:

- A lump or mass in the kidney area or abdomen
- Blood in the urine
- Lower back pain or pain in the side that doesn't go away
- Fatigue
- Recurrent fever
- Loss of appetite
- Weight loss
- Intestinal obstruction
- A general feeling of poor health

These symptoms can also come from other conditions. Seeing your health care provider is the only way to find out what may be causing these symptoms.

## How is kidney cancer diagnosed?

Your health care provider may do one or more of the following procedures to determine if you have kidney cancer:

- Complete medical history
- Physical exam
- Blood and urine tests
- Cystoscopy-viewing the bladder with a flexible scope
- Imaging tests such as x-rays, bone scans, intravenous pyelogram (IVP), CT scans, MRIs, ultrasounds or arteriograms
- Needle biopsy of the tumor

## What are the treatments for kidney cancer?

There are several treatment options for kidney cancer. They are usually used in combination. The treatment plan chosen is based on the type and stage of the cancer, as well as the age and general health of the patient. The treatments are:

- Surgery - includes options ranging from removal of only the cancerous section of the kidney and some surrounding normal tissue to removal of the kidney and nearby organs or areas where the tumor has spread.
- Chemotherapy
- Radiation therapy
- Immunotherapy
- Clinical trials

## What can I do to reduce my risk of kidney cancer?

An important risk factor for the most common types of kidney cancer (renal cell carcinoma and transitional cell carcinoma of the renal pelvis) is cigarette smoking. Experts estimate that the majority of transitional cell cancers of the renal pelvis and about 25 - 30 % of renal cell cancers are due to smoking. Thus, the best way to prevent kidney cancer is to not smoke. If you already smoke, you can reduce your risk by quitting. Additionally, obesity has been consistently linked with renal cell cancer. You may reduce your risk of cancer by maintaining a healthy diet and exercising.

### **Where to Find More Information on Kidney Cancer**

**American Cancer Society**  
phone: 1-800-ACS-2345,  
web site: [www.cancer.org](http://www.cancer.org)

**National Cancer Institute**  
phone: 1-800-4-CANCER  
web site: [www.rex.nci.nih.gov](http://www.rex.nci.nih.gov)

**National Kidney and Urologic Disease  
Information Clearinghouse**  
301-654-4415  
<http://www.niddk.nih.gov>

