Kidney Cancer

Kidney cancer is cancer that originates in the kidneys, which filter blood and remove waste. The most common type of kidney cancer in adults is renal cell carcinoma that begins in the lining of the tubes of the kidney.

Statistics
- In 2019, an estimated 73,820 new cases of kidney and renal pelvis cancers are expected be diagnosed in the U.S.
- An estimated 14,770 Americans are expected to die from the disease in 2019.
- In Texas in 2019, an estimated 5,846 new kidney and renal pelvis cancers are expected to be diagnosed, and 1,315 Texans are expected to die from the disease.
- The average age of people when diagnosed with kidney cancer is 64. Kidney cancer is rare under age 45.
- Of the many types of kidney cancer, about 90 percent of cases diagnosed are renal cell carcinoma.
- Renal cell carcinoma only represents about 3 percent of all cancers diagnosed in the U.S. each year.

Risk Factors
The exact causes of kidney cancer are unknown; however, some risk factors are linked to the disease.
- **Obesity:** Kidney cancer risk increases for people who are overweight.
- **Race:** African Americans, Native Americans, and Alaska Natives have a slightly increased risk of kidney cancer.
- **Certain medicines:** Use of phenacetin, a popular non-prescription pain reliever, has been linked to renal cell carcinoma. Because it has not been available for three decades, it is no longer a major concern.
- **High blood pressure:** People with high blood pressure are at a higher risk of developing the disease. It is not known whether the condition or the medicine, including diuretics, used to treat it is to blame for the increase in risk.
- **Gender:** Men are about twice as likely to develop the disease as women.
- **Family history:** Those with a strong family history of renal cell carcinoma are at a higher risk to develop the cancer. Brothers and sisters of those diagnosed are at the highest risk.
- **Smoking:** Tobacco use has a strong link to kidney cancer, and smoking raises the risk for developing the disease. The risk decreases over time if tobacco use ceases.
- **Kidney disease:** Those with advanced kidney disease and those on dialysis have an increased risk.
- **Hereditary disease:** People with rare inherited conditions including Birt-Hogg-Dube syndrome, hereditary leiomyoma-renal cell carcinoma, hereditary papillary renal cell carcinoma, hereditary renal oncocytoma, familial renal cancer, tuberous sclerosis, Cowden syndrome, and von Hippel-Lindau disease have an increased risk.
- **Exposure to chemicals:** Some research links exposure to cadmium, some herbicides, and organic solvents to an increased risk of developing kidney cancer.

Symptoms and Signs
Kidney cancer varies with each patient; some have no symptoms in the early stages. People with these symptoms should consult their physician:
- Blood in the urine
- Low blood counts (anemia)
- Unexplained weight loss
- Unexplained fever
- Loss of appetite
- Fatigue
- Unexplained low back or side pain
- Abdominal, side, or lower back mass
- High blood counts
- High calcium in blood
- Tumor calcification on X-ray

Tips for Prevention
Kidney cancer cannot be completely prevented. However, certain lifestyle changes, such as quitting smoking, maintaining a healthy weight, controlling high blood pressure, and reducing or all together avoiding exposure to environmental toxins, are believed to decrease the risk of developing the disease.

Treatment Options
Kidney cancer, depending on the stage, may be treated by a team of specialists including medical oncologists, radiation oncologists, and urologists. Treatment options vary widely depending on the cancer’s type, stage, and the patient’s overall health. Treatment options include removing part or all of the kidney, chemotherapy, immunotherapy, radiation therapy, targeted therapy, surveillance, ablation, and other local therapies. Many patients receive a combination of treatments.

Source: American Cancer Society, Kidney Cancer Association, National Cancer Institute, and Texas Cancer Registry