Wilms tumor is a type of kidney cancer that nearly always occurs in children, also called nephroblastoma.

Risk Factors for Wilms tumor

Most Wilms tumors have no clear cause and no environmental risk factors have been identified either in childhood or during a woman's pregnancy.

Demographics

- Race: Kidney cancer is slightly more common in African Americans when compared with whites. Asian American children have the lowest rates of Wilms tumor.
- Gender: Wilms tumor is slightly more common in girls than boys

Medical history

Wilms tumor is more common in those children who have a history of other birth defects, such as:

- Hemihypertrophy (enlargement of limb or one half of the body)
- Aniridia (complete or partial lack of the iris of the eye)
- Undescended testes in boys
- Hypospadias (urethral opening in boys on the underside of the penis)

Family history

Wilms tumors can be diagnosed among multiple relatives within a family. It is thought that some of these patterns may be explained by a chromosomal or genetic change where a gene is missing.

Wilms tumor has been strongly associated with several genes and genetic syndromes

- WAGR syndrome is associated with aniridia (absence of the iris of the eye), genital and urinary abnormalities, and intellectual disability
- Beckwith-Wiedemann syndrome is associated with children who are larger than average, including their organs and specifically an enlarged tongue. One limb may be longer than the other.
- Denys-Drash syndrome results in kidney failure and reproductive organs fail to develop completely
- CTNNB1-related Wilms tumor

- AMER1-related Wilms tumor

Click here to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.