Genitourinary (GU) cancers include tumors of the prostate, bladder, kidney, and testis, as well as less common cancers, such as those of the penis, ureters, and other urinary organs.

**Diagnosis**

**Prostate cancer:** Prostate cancer is the most common cancer among men in the United States, except for skin cancer. About 56% of prostate cancers are diagnosed in men who are 65 or older, and 97% occur in men 50 and older. The incidence of prostate cancer is 60% higher in black men than in white men. In fact, African American men and Caribbean men of African descent have the highest rates of prostate cancer in the world. With an estimated 220,800 new cases of prostate cancer in 2015, prostate cancer will account for 26% of new cancer diagnoses in men.

**Bladder cancer:** Bladder cancer is the fourth most common cancer among men in the United States. It is three to four times as common in men than in women and almost twice as common in white men than in black men. Rates of bladder cancer decreased by 1.6% per year for men and by 1.1% per year for women between 2007 and 2011. The development of bladder cancer is strongly associated with exposure to tobacco. About half of all bladder cancers in both men and women are linked to smoking.

**Kidney cancer:** Kidney cancer is the seventh most common cancer among men and tenth most common cancer among women in the United States. After increasing for several decades, kidney cancer incidence rates remained stable from 2007 to 2011. Smoking is a common cause of kidney cancer, and obesity causes an estimated 30% of cases.

**Testicular cancer:** Testicular cancer is less common than other genitourinary cancers. Approximately 4 out of 100 men will be diagnosed with testicular cancer during their lifetime. More than half of testicular cancer diagnoses occur in men between the ages of 20 and 45. However, men of any age can develop this disease, including men as young as 15.

**Survival**

Prostate cancer: Most prostate cancers (93%) are diagnosed at a local or regional stage, for which the five-year survival rate is almost 100%. The five-year survival rate for all stages of prostate cancer has increased from 68% to nearly 100% during the past 25 years.

Bladder cancer: Half of all patients with bladder cancer are diagnosed with noninvasive (in situ) disease, which has a much higher survival rate (96%).

Most bladder cancers can be cured with surgery (removal of the bladder) or surgery combined with chemotherapy; if the disease returns after original treatment (called a recurrence) or spreads to another part of the body (metastasizes), chemotherapy, radiation therapy, and/or additional treatments are needed. For more information about available treatments, visit http://www.cancer.net/cancer-types/bladder-cancer/treatment-options.
Kidney cancer: About 64% of kidney cancers are diagnosed when they are at a local stage (see table below) when they are easier to treat.

Five-Year Survival Rates for Select Genitourinary Cancers, 2004-2010

<table>
<thead>
<tr>
<th>Cancer Type</th>
<th>All Stages</th>
<th>Local</th>
<th>Regional</th>
<th>Distant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>99%</td>
<td>&gt;99%</td>
<td>&gt;99%</td>
<td>28%</td>
</tr>
<tr>
<td>Bladder</td>
<td>77%</td>
<td>69%</td>
<td>34%</td>
<td>6%</td>
</tr>
<tr>
<td>Kidney</td>
<td>72%</td>
<td>92%</td>
<td>65%</td>
<td>12%</td>
</tr>
<tr>
<td>Testis</td>
<td>95%</td>
<td>99%</td>
<td>96%</td>
<td>73%</td>
</tr>
</tbody>
</table>

Mortality

Prostate cancer: Prostate cancer is the second leading cause of cancer death in men in the United States and the fifth leading cause of cancer death in men worldwide. Mortality from prostate cancer has been decreasing since the early 1990s, with deaths decreasing by 3.2% per year between 2007 and 2011. However, black men are still more than two times more likely to die of prostate cancer than white men. More than 307,000 men died from prostate cancer worldwide in 2012, 6.6% of the total male deaths from cancer. Most prostate cancer deaths result from metastatic, castration-resistant prostate cancer (CRPC). If cancer has spread to another location in the body, it is called metastatic cancer. Prostate cancer that no longer responds to hormone therapy, such as LHRH agonists or anti-androgens, is considered castration resistant. In the last decade a number of new treatment options for CRPC have been developed. Learn more about the treatment of metastatic castration-resistant prostate cancer.

Bladder cancer: Bladder cancer is the eighth most common cause of cancer death in men. Between 2007 and 2011, deaths from bladder cancer declined in women by 0.4% per year but remained stable in men. Despite numerous clinical trials, no new treatments for advanced bladder cancer have been successfully developed in the last decade, and it remains an area of unmet need.

Kidney cancer: Kidney cancer is the tenth most common cause of cancer death in men. Deaths from kidney cancer have decreased each year between 2007 and 2011 by about 0.9%. The use of a number of new medical therapies for advanced kidney cancer in the last decade, such as angiogenesis inhibitors that target VEGF, help account for this decrease in mortality.

Testicular cancer: Testicular cancer is very often curable, even at an advanced stage, making the risk of dying from the disease 1 in 5,000. Many research efforts now focus on reducing the treatment intensity in patients through improved selection of patients for aggressive treatment versus surveillance.

Risk Factors

Because GU cancers are a large group of cancers that start in different organs, the risk factors are not the same for all types of GU cancers. Learn more about the risk factors for each type of cancer:

- **Bladder Cancer**
- **Kidney Cancer**
- **Prostate Cancer**
- **Penile Cancer**
- **Testicular Cancer**

Prevention

No intervention is guaranteed to prevent cancer. However, the following steps may help reduce the risk of developing certain GU cancers:

- **Quitting smoking**, lowering blood pressure, controlling body weight, and eating a diet high in fruits and low in fat may help reduce the risk of kidney cancer.
A man may be able to lower his risk of penile cancer by not smoking, avoiding infection with HPV or HIV/AIDS, and practicing good hygiene.

SCREENING
With the exception of prostate cancer there are few screening recommendations for GU cancers.

Prostate Cancer Screening Recommendations
Two tests are commonly used to screen for prostate cancer: the prostate-specific antigen (PSA) blood test and digital rectal examination (DRE, a test in which the doctor feels the surface of the prostate for any irregularities).

There is controversy about using the PSA test to screen men with no symptoms of prostate cancer. On one hand, the PSA test is useful for detecting early prostate cancer, which helps men get the treatment they need before the cancer spreads. On the other hand, PSA screening finds conditions that are not cancer and slow-growing prostate cancers that would never threaten a man's life. ASCO recommends that men expected to live 10 years or less should not have PSA screening, and men expected to live longer than 10 years should talk with their doctors to find out if the test is appropriate for them.

For medical illustrations of the different stages of prostate cancer, please visit the Cancer.Net's prostate cancer guide.

Sources: