Ovarian Cancer is one of the most deadly of women's cancers. Each year, more than 20,000 women will be diagnosed with ovarian cancer. This cancer typically occurs in women in their fifties and sixties with the median age being 63. Unfortunately many women don't seek help until the disease has begun to spread, but if detected at its earliest stage, the five-year survival rate is more than 93%. The symptoms of ovarian cancer are often subtle and easily confused with other ailments.

Get the Facts. Recognize the Signs.
Ovarian cancer is a type of cancer that begins in the ovaries. Women have two ovaries, one on each side of the uterus. The ovaries — each about the size of an almond — produce eggs (ova) as well as the hormones estrogen and progesterone.

Ovarian cancer often goes undetected until it has spread within the pelvis and abdomen. At this late stage, ovarian cancer is more difficult to treat and is frequently fatal. Early-stage ovarian cancer, in which the disease is confined to the ovary, is more likely to be treated successfully.

Ovarian cancer may not produce symptoms, particularly in the early stages. However, when symptoms do occur, they include:

- Bloating or a feeling of pressure
- Pelvic or Abdominal pain
- Difficulty eating or feeling full quickly
- Urinary urgency or frequency

Other symptoms may include:

- Nausea, indigestion, gas, constipation or diarrhea
- Extreme fatigue
- Shortness of breath
- Backaches
- Weight Gain
Many women who are diagnosed with Ovarian cancer have a genetic history that may include carrying the BRCA mutation gene and having a strong family history of ovarian cancer. BRCA1 and BRCA2 are human genes that produce tumor suppressor proteins. These proteins help repair damaged DNA and, therefore, play a role in ensuring the stability of the cell’s genetic material. When either of these genes is mutated, or altered, such that its protein product is not made or does not function correctly, DNA damage may not be repaired properly. As a result, cells are more likely to develop additional genetic alterations that can lead to cancer.

Age is the strongest risk factor for ovarian cancer. It is much more common after menopause, and using hormone therapy may increase a woman’s risk. This risk appears strongest in those who take estrogen therapy without progesterone for at least 5-10 years. It is not known whether taking estrogen and progesterone in combination also increases risk.

Obesity is also a risk factor for ovarian cancer; obese women have both a higher risk of developing ovarian cancer and higher death rates from this cancer than non-obese women. The risk seems to correlate with weight, so the heaviest women have the highest risk.
There is no adequate screening test of ovarian cancer at this time which is one of the reasons that this cancer is often discovered in later stages. However, Two ways to screen for ovarian cancer in its early stages are ultrasound of the ovaries and measurement of levels of a protein called CA-125 in the blood. Neither of these methods has been shown to save lives when used to test women of average risk. Therefore, screening is currently recommended only for women at higher risk.

**DIAGNOSING OVARIAN CANCER**

Imaging tests like CT, MRI, or ultrasound can reveal an ovarian mass, but only a sampling of the tissue (biopsy) can determine whether the mass is cancerous. A biopsy is analyzed in a laboratory to determine whether or not an ovarian mass is due to cancer.

Staging of ovarian cancer refers to the extent to which it has spread to other organs or tissues. This is typically evaluated during surgery. Stages of ovarian cancer are as follows:

- **Stage I:** The cancer is limited to the ovaries
- **Stage II:** The cancer has spread to the uterus or other pelvic organs
- **Stage III:** The cancer has spread to lymph nodes or lining tissues of the abdomen
- **Stage IV:** The cancer has spread to distant sites, like the liver or lungs
Treatments for Ovarian Cancer

Ovarian Cancer Surgery
Surgery is not only used to diagnose and stage ovarian cancer, but it is also used as a first step in treatment. Surgery to remove as much of the tumor as possible is typically carried out. It may be necessary to remove the uterus as well as surrounding tissues in more advanced cases.

Chemotherapy
Chemotherapy is typically given after surgery for all stages of ovarian cancer. Chemotherapy drugs may be given orally, intravenously, or administered directly into the tumor site (intraperitoneal chemotherapy). Women with LMP tumors generally do not require chemotherapy after surgery unless the tumors grow back.

Targeted Therapies
New therapies for ovarian cancer may be directed at blocking tumor growth by interfering with the formation of blood vessels to supply the tumor. The process of blood vessel formation is known as angiogenesis. The drug Avastin works by blocking angiogenesis, causing tumors to shrink or stop growing. Avastin is used in some other cancers, and it is currently being tested in ovarian cancer.