

# HEALTH IN OUR HANDS!

The Arkansas State University Wellness Program Newsletter  
[www.astate.edu/conhp](http://www.astate.edu/conhp)



## Stomach Cancer

### Overview

Stomach cancer or gastric cancer begins on the inner layer of the stomach. Stomach cancer may invade deep into the stomach wall, and can grow through the outer layer into nearby organs. Cancer occurs when a disturbance in the cell division process and a buildup of extra cells forms a mass of tissue called a growth, polyp, or tumor. Stomach cancer is uncommon in the United States, and the number of people diagnosed with the disease each year is declining. Stomach cancer is more prevalent in other countries such as China and Japan. The most common type of stomach cancer is adenocarcinomas. This cancer starts from cells that form in the lining of the innermost layer, the mucosa. Other types include lymphomas, gastrointestinal stromal tumors and carcinoid tumors but they are much less common. The focus of this newsletter is adenocarcinoma.

### Risk Factors

No cause has been identified for stomach cancer. Risk factors are anything that

affects a person's chance of getting a disease such as cancer.

- Gender: Stomach cancer is more common in men.
- Age: The chances increase after the age of 50. Most people are in their 60s or 80s when cancer is found.
- Ethnicity: More common in Hispanics, African Americans, and Asian Pacific Islanders.
- Bacteria Infection: The major cause of stomach cancer is an infection from bacteria called *Helicobacter pylori*. Long term infections from this germ may lead to inflammation and pre-cancer changes.
- Stomach Lymphoma: People who have been treated for the stomach lymphoma known as MALT lymphoma have an increased risk of adenocarcinoma.
- Diet: Diets that are high in smoked foods, salted fish and meats, and pickled vegetables have an increased risk.
- Tobacco use: Smoking doubles the risk of stomach cancer.
- Long term inflammation: This could be caused by previous surgery or pernicious anemia.
- Obesity: Being overweight increases the chances of cancer.
- Family History: People with close family members who have had stomach cancer are more likely to get the disease.
- Stomach Polyps: Most polyps do not increase the risk but one type (adenomatous polyps) can change into stomach cancer.
- Occupation: Those working with coal, metal or rubber have higher risk.
- Immune Weakness: People with Common Variable Immuno-deficiency have an increased risk.

### Symptoms

Signs and symptoms of stomach cancer may include:

- Fatigue
- Feeling bloated after eating
- Feeling full after eating small amounts of food
- Heartburn that is severe and persistent
- Indigestion that is severe and unrelenting
- Nausea that is persistent and unexplained
- Stomach pain
- Vomiting that is persistent
- Weight loss that is unintentional
- Swelling or fluid build-up in the abdomen

### Diagnosis

If your doctor thinks you might have stomach cancer then you will be referred to an gastroenterologist. Tests that will be performed may include

- Upper endoscopy : A thin, light tube with a camera is put down the throat. The throat will be numbed and/or patient will be given drugs to go to sleep.
- Biopsy: if anything looks abnormal during the endoscopy, a sample is removed and looked at under a microscope.

When stomach cancer spreads to nearby organs or tissues other tests are needed to stage the cancer. The other tests include:

- Chest x-ray: This shows if there is cancer in the lungs
- CT scan: This can help diagnose tumors in the liver, pancreas, or elsewhere in the body.
- Endoscopic ultrasound: This shows how deeply

the cancer has invaded the wall of the stomach.

- Laparoscopy: A surgeon may make small incisions to remove lymph nodes or remove tissues for samples for a biopsy.

### Stages

Stage 0: The tumor is only in the inner layer of the stomach

Stage I is one of the following:

- The tumor has invaded only the submucosa. Cancer cells may be found in up to 6 lymph nodes.
- The tumor has invaded the muscle layer or subserosa. Cancer cells have not spread to lymph nodes or other organs

Stage II is one of the following:

- The tumor has invaded only the submucosa. Cancer cells have spread to 7-15 lymph nodes.
- The tumor has invaded the subserosa. Cancer cells have spread to 1-6 lymph nodes.
- The tumor has penetrated the outer layer of the stomach. Cancer cells have not spread to lymph nodes or other organs.

Stage III is one of the following:

- The tumor has invaded the subserosa. Cancer cells have spread to 7-15 lymph nodes .
- The tumor has penetrated the outer layer. Cancer cells have spread to 1-15 lymph nodes.
- The tumor has invaded nearby organs, such as liver, colon or spleen. Cancer cells have not

spread to lymph nodes or to distant organs.

Stage IV is one of the following:

- Cancer cells have spread to more than 15 lymph nodes.
- Tumor has invaded nearby organs and at least 1 lymph node.
- Cancer has spread to distant organs.

### Treatment

After the stage of cancer has been determined, the patient and the doctor will come up with the best treatment plan. The main treatments for stomach cancer include surgery, chemotherapy, targeted therapy and radiation therapy. The best approach is to use two or more of these treatment methods.

### References

- [www.cancer.org](http://www.cancer.org)
- [www.mayoclinic.com](http://www.mayoclinic.com)
- [www.medicinenet.com](http://www.medicinenet.com)

### Other News:

\*\*If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at [hanrahan@astate.edu](mailto:hanrahan@astate.edu).

\*\*\*\*\*

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or [hanrahan@astate.edu](mailto:hanrahan@astate.edu). Produced by Michelle Williams, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.