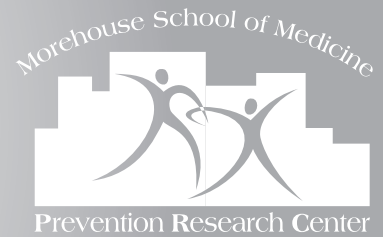


# Pancreatic Cancer



## WHAT IS PANCREATIC CANCER?

Pancreatic cancer occurs when the cells in the pancreas begin to grow out of control. The pancreas is an organ in the digestive system that is located behind the stomach and is responsible for releasing enzymes that help with breaking down food and hormones that regulate blood sugar levels. The pancreas contains two types of cells: exocrine cells and endocrine cells. Exocrine cells make up the majority of the cells in the pancreas.

## ARE THERE CERVICAL CANCER DISPARITIES?

Almost all the individuals who develop pancreatic cancer are older than 45 years of age. Men are slightly more likely than women to develop pancreatic cancer. African Americans are slightly more likely than whites to develop pancreatic cancer. Inherited genetic mutations account for 10% of all pancreatic cancers, including hereditary breast and ovarian cancer syndrome and familial pancreatitis (inflammation of the pancreas)

## WHO'S AT RISK?

For both men and women, the average lifetime risk of pancreatic cancer is about 1 in 65 (1.5%). In 2016, in the United States, about 53,070 people (27,670 men and 25,400 women) will be diagnosed with pancreatic cancer. About 41,780 people (21,450 men and 20,330) women will die of pancreatic cancer. The chances of getting this cancer are amplified by certain risk factors.

## WHAT ARE THE TYPES OF PANCREATIC CANCER?

The cells of the pancreas form different types of tumors. The two types of pancreatic cancers include exocrine pancreatic cancers and endocrine pancreatic cancers. Distinguishing between exocrine and endocrine cancers:

### Exocrine pancreatic cancer

Exocrine cancers are the most common type of pancreatic cancer, representing about 95% of cancer cases. About 95% of exocrine cancers are adenocarcinomas. Adenocarcinomas begin in the pancreas ducts. Less common exocrine cancers include adenosquamous carcinomas, squamous cell carcinomas, signet ring cell carcinomas, undifferentiated carcinomas, and undifferentiated carcinomas with giant cells.

### Endocrine pancreatic cancer

Endocrine cancers make up less than 5% of all pancreatic cancers. These uncommon tumors are often called pancreatic neuroendocrine tumors (NETs) or islet cell tumors. Pancreatic NETs can be benign, which means they are not cancerous, or malignant (cancerous). About half of the pancreatic NETs make hormones that are released into the blood and cause symptoms. Called functioning tumors, each of these tumors are named for the hormone the tumor makes: gastrinomas, insulinomas, glucagonomas, somatostatinomas, VIPomas and PPomas.



*The risk factors for pancreatic cancer that can be changed include tobacco use, obesity, and workplace exposure.*

## WHAT ARE THE RISK FACTORS OF PANCREATIC CANCER?

A risk factor is anything that may increase the chance of getting a disease. Some risk factors can be changed; others cannot. Having a risk factor (or several) does not mean you will get the disease and some people that develop a disease do not experience any of the risk factors. Most risk factors for pancreatic cancer are risk factors for exocrine pancreatic cancer. The risk factors for pancreatic cancer that can be changed include tobacco use, obesity, and workplace exposure. Smoking is one of the most important risk factors for pancreatic cancer. Compared to those who have never smoked, the risk of developing pancreatic cancer is about twice as high among smokers. Roughly 20-30% of pancreatic cancers are caused by cigarette smoke. Being overweight or obese increases the likelihood of developing pancreatic cancer by 20%. Being exposed to certain chemicals in the workplace can also put individuals at risk for pancreatic cancer.

The risk factors for pancreatic cancer that cannot be changed include:

- Age
- Gender
- Race
- Family history
- Inherited genes

## HOW CAN I DECREASE MY RISK FOR PANCREATIC CANCER?

Pancreatic cancer, even when diagnosed early, has a low survival rate. This cancer spreads rapidly and is rarely detected in its early stage, which is the main reason why it is a leading cause of cancer death. Unfortunately, the signs and symptoms may not appear until the cancer is advanced and unable to be removed by surgery. Symptoms for this cancer include yellowing of the skin and eyes (jaundice), pain in the abdomen and back, weight loss and fatigue. Although there is no way to prevent this cancer, steps to reducing your risk include:

- Stopping tobacco usage
- Maintaining a healthy weight
- Choosing a healthy diet.

### Reference:

American Cancer Society. (2016). What is Pancreatic Cancer? <http://www.cancer.org/cancer/pancreaticcancer/detailedguide/pancreatic-cancer-what-is-pancreatic-cancer>

Mayo Clinic. Pancreatic Cancer. (2016). <http://www.mayoclinic.org/diseases-conditions/pancreatic-cancer/basics/definition/con-20028153>

MedlinePlus. (2016). Pancreatic Cancer. <https://www.nlm.nih.gov/medlineplus/pancreaticcancer.html>

National Cancer Institute. (2016). Pancreatic Cancer Treatment. <http://www.cancer.gov/types/pancreatic/patient/pancreatic-treatment-pdq>

WebMD. (2016). Pancreatic Cancer: Symptoms, Diagnosis, Treatments, and More. <http://www.webmd.com/cancer/pancreatic-cancer/>

## Additional Factors

Having health conditions such as:

- ✓ Diabetes
- ✓ Chronic pancreatitis
- ✓ Cirrhosis of the liver
- ✓ Stomach problems



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