

Approximately 1.5% of individuals will be diagnosed with pancreatic cancer during their lifetimes, making it overall fairly rare. There are many different causes and risk factors for developing pancreatic cancer, including genetics, environment, and chance. As with most cancers, a specific cause for the great majority of pancreatic cancers cannot be identified. Rather it is likely that there are multiple factors which play a part in the development of the cancer.

Ninety-five percent of pancreatic cancers occur in the exocrine cells (called pancreatic adenocarcinoma). A less common type of pancreatic cancer affects the hormone-producing cells, called islet cells, and is referred to as a pancreatic neuroendocrine tumor (PNET).

## **Risk factors for some pancreatic cancers**

### **Demographics**

- Age: the risk for pancreatic cancer (and most other cancers) increases as we get older. The average age of diagnosis of pancreatic cancer is age 71.
- Race: African Americans are at slightly increased risk of pancreatic cancer
- Gender: Men are slightly more likely than women to develop pancreatic cancer

### **Environmental factors**

- Tobacco use: Cigarette smoke is considered to be one of the strongest risk factors for pancreatic cancer and is thought to cause as many as 30% of these cancers. Smokers are twice as likely to develop pancreatic cancer compared with non-smokers. Pipe smokers and smokeless tobacco is also linked to higher chance to develop pancreatic cancer.
- Obesity: Being overweight is a risk factor for many cancers, including pancreatic cancer.
- Chemical exposure: Chemicals used in the dry cleaning and metal working industries have been associated with a higher chance of developing pancreatic cancer.

### **Medical history**

- Diabetes: Individuals with type II diabetes are at increased risk of pancreatic cancer. It is unclear if type I (pediatric-onset) diabetics are also at increased risk of pancreatic cancer.

- **Pancreatitis:** Chronic inflammation of the pancreas is a known risk factor for pancreatic cancer, particularly when a person is also a smoker; However, most people with pancreatitis still do not go on to develop pancreatic cancer.
- **Cirrhosis:** Scarring of the liver due to damage from chronic alcohol use or infection puts a person at increased risk of pancreatic cancer.
- ***Helicobacter pylori* (*H. pylori*) infection:** This bacterial infection of the stomach as well as an increase in stomach acid may increase pancreatic cancer risk.

Factors like alcohol use, physical inactivity, coffee, and diets that are high in red meat and processed meats are all proposed risk factors for pancreatic cancer, however these are still being investigated to more fully understand their role.

### **Family history**

Most people diagnosed with pancreatic cancer do not have a family history of this cancer, however it can appear to cluster within families. Having a close relative with pancreatic cancer can increase one's chances of developing this disease, but this increase is likely small overall.

### **Genetic predisposition syndromes**

As many as 10% of all pancreatic cancers may be due to a genetic risk factor and therefore it is recommended that all individuals with pancreatic cancer consider genetic counseling. Some hereditary predispositions to pancreatic cancer include:

- [Hereditary Breast and Ovarian Cancer \(HBOC\) syndrome \(BRCA1/2\)](#)
- [Lynch syndrome](#)
- Familial Atypical Multiple Mole and Melanoma (FAMMM) syndrome
- Familial Pancreatitis, PRSS1
- [Peutz Jeghers Syndrome](#)

Click [here](#) to learn more about scheduling a genetic counseling appointment for questions about hereditary cancer predisposition.

### **Additional Resources**

\*[Positive Results Facebook Group](#)

Genetic Support Foundation hosts a Facebook group for Hereditary Cancer Support and Resources. Get trusted information and join a community of support.

\*[Cascade Screening Connector](#)

Genetic Support Foundation has partnered with the Washington State Department of Health to provide cascade screening to help people identify and contact family members who may have an increased chance of developing cancer.

\*[FORCE \(Facing Our Risk of Cancer Empowered\)](#)

The FORCE mission is to improve the lives of individuals and families facing hereditary cancer. Resources include peer navigation and expert-reviewed information.

\*[AliveAndKickn](#) AliveAndKickn is a nonprofit working to improve the lives of individuals and families affected by Lynch Syndrome and associated cancers through research, education, and screening.

\*[Health Experiences USA](#) This national research project brings patient voices into the healthcare experience and features video clips of people facing hereditary cancer. Individuals from a variety of backgrounds share both positive and negative experiences about living with hereditary cancer.