



[cancer.org](https://www.cancer.org) | 1.800.227.2345

Small Intestine Cancer Causes, Risk Factors, and Prevention

Learn about the risk factors for small intestine cancer and what you might be able to do to help lower your risk.

Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Learn more about the risk factors for small intestine cancer.

- [Risk Factors for Small Intestine Cancer \(Adenocarcinoma\)](#)
- [What Causes Small Intestine Cancer \(Adenocarcinoma\)?](#)

Prevention

There is no sure way to prevent small intestine cancer. But there are things you can do that might lower your risk. Learn more.

- [Can Small Intestine Cancer \(Adenocarcinoma\) Be Prevented?](#)

Risk Factors for Small Intestine Cancer (Adenocarcinoma)

- [Sex](#)
- [Age](#)
- [Race/ethnicity](#)
- [Smoking and alcohol use](#)
- [Diet](#)
- [Celiac disease](#)
- [Colon cancer](#)
- [Crohn's disease](#)
- [Inherited syndromes](#)

(Note: This information is about small intestine cancers called adenocarcinomas. To learn about other types of cancer that can start in the small intestine, see [Gastrointestinal Carcinoid Tumors](#)¹, [Gastrointestinal Stromal Tumors](#)², or [Non-Hodgkin Lymphoma](#)³.)

A risk factor is anything that changes your chance of getting a disease such as cancer. Different cancers have different risk factors. Some risk factors, like smoking, can be changed. Others, like a person's age or family history, can't be changed.

But risk factors don't tell us everything. Having a risk factor, or even several, does not mean that a person will get the disease. And many people who get the disease may have few or no known risk factors.

Because small intestine adenocarcinoma is so uncommon, risk factors for this disease have been hard to study. Some of the known risk factors include:

Sex

Small intestine cancer occurs slightly more often in men than in women.

Age

Cancers of the small intestine tend to occur more often in older people. They are most often found in people in their 60s and 70s.

Race/ethnicity

In the United States, African Americans are affected more often by these cancers than people of other races/ethnicities.

Smoking and alcohol use

Some studies have found an increased risk with either [smoking](#)⁴ or drinking [alcohol](#),⁵ but not all studies have found this.

Diet

Some research has suggested that diets high in red meat and salted or smoked foods might raise the risk of small intestine cancer.

Celiac disease

For people with celiac disease, eating gluten (a protein that is found in wheat and some other types of grain) causes the body's immune system to attack the lining of the intestines. People with celiac disease have an increased risk of a certain kind of lymphoma of the intestine called *enteropathy-associated T-cell lymphoma*. They may also have an increased risk of small intestine cancer.

Colon cancer

People who have had colon cancer have an increased risk of getting cancer of the small intestine. This could be due to shared risk factors.

Crohn's disease

Crohn's disease is a condition in which the immune system attacks the gastrointestinal (GI) tract. This disease can affect any part of the GI tract, but it most often affects the lower part of the small intestine. People with this condition have a much higher risk of small intestine cancer (particularly adenocarcinoma). These cancers are most often seen in the ileum (the last part of the small intestine, near the colon).

Inherited syndromes

People with certain inherited conditions have a higher risk of small intestine cancer (mainly adenocarcinoma).

Familial adenomatous polyposis (FAP)

In this condition, many (often hundreds) of polyps develop in the colon and rectum. If the colon isn't removed, one or more of these polyps will become cancerous. Polyps can also develop in the stomach and the small intestine, and they can lead to cancers in these areas. In FAP, most small intestine cancers are found in the duodenum. This condition is caused by an abnormal change (mutation) in the *APC* gene, and is discussed more in [Colorectal Cancer](#)⁶.

Lynch syndrome (hereditary nonpolyposis colorectal cancer, or HNPCC)

In most cases, this disorder is caused by a defect in one of several mismatch repair (MMR) genes, such as *MLH1*, *MSH2*, *MSH6*, *PMS1*, or *PMS2*. Having an abnormal version of any one of these genes reduces the body's ability to repair damage to its DNA. This results in an increased risk for cancer of the colon and small intestine, as well as a high risk of [endometrial](#)⁷ and [ovarian](#)⁸ cancer. This condition is also discussed in [Colorectal Cancer](#)⁹.

Peutz-Jeghers syndrome (PJS)

People with this condition develop polyps in the stomach and intestines, as well as in other areas including the nose, the airways of the lungs, and the bladder. They can also have dark freckle-like spots on the lips, inner cheeks and other areas. PJS can increase the risk of many types of cancer, including small intestine adenocarcinoma. This syndrome is caused by mutations in the *STK11* (*LKBS can increase*

Hyperlinks

1. www.cancer.org/cancer/types/gastrointestinal-carcinoid-tumor.html
2. www.cancer.org/cancer/types/gastrointestinal-stromal-tumor.html
3. www.cancer.org/cancer/types/non-hodgkin-lymphoma.html
4. www.cancer.org/cancer/risk-prevention/tobacco.html

What Causes Small Intestine Cancer (Adenocarcinoma)?



At this time, there is no known way to prevent most small intestine adenocarcinomas. There are some [factors that might increase the risk for these cancers](#), such as smoking, drinking alcohol, and eating a diet that's high in red meats, so making healthier choices concerning these risk factors might lower your risk. Small intestine cancers are rare to begin with, but making these types of healthy choices might also lower your risk of some other types of cancer.

For people at high risk

For some people at high risk of small intestine cancer because of certain [inherited syndromes](#), surgery might be an option to lower risk. For example, people with familial adenomatous polyposis (FAP) can have a very high risk of small intestine cancer starting in the duodenum (the first part of the small intestine). If a person has many duodenal polyps (growths), doctors may suggest surgery to remove the duodenum before cancer can develop.

Williams & Wilkins; 2015.

Doyon L, Greenstein A, Greenstein A. Chapter 76: Cancer of the Small Bowel. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 5th ed. Philadelphia, Pa: Elsevier; 2014.

Overman MJ, Kunitake H. Epidemiology, clinical features, and types of small bowel neoplasms. UpToDate. Accessed at www.uptodate.com/contents/epidemiology-clinical-features-and-types-of-small-bowel-neoplasms on January 4, 2018.

Skipworth JRA, Morkane C, Raptis DA, et al. Pancreaticoduodenectomy for advanced duodenal and ampullary adenomatosis in familial adenomatous polyposis. *HPB(Oxford)*. 2011;13(5):342-349.

Last Revised: February 8, 2018

Written by

The American Cancer Society medical and editorial content team
(<https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html>)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy (www.cancer.org/about-us/policies/content-usage.html).

cancer.org | 1.800.227.2345