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Adrenal Cancer Causes, Risk Factors, and Prevention

Learn about the risk factors for adrenal cancer and if there are things 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 adrenal cancer.

- [Adrenal Cancer Risk Factors](#)
- [What Causes Adrenal Cancer?](#)

Prevention

Since there are no known preventable risk factors for this cancer, it is not possible to prevent this disease.

- [Can Adrenal Cancer Be Prevented?](#)

Adrenal Cancer Risk Factors

A risk factor is anything that increases your chances of getting a disease, such as adrenal cancer. Having a risk factor, or even many, does not mean that you will get the

disease. Many people with risk factors never develop adrenal cancer, while others with this disease have few or no known risk factors.

Certain adrenal cancer risk factors that are related to personal behaviors, such as smoking can be changed. Others, like a person's age, genetics, and family history can't be changed.

- [Genetic syndromes](#)
- [Lifestyle and environmental factors](#)

Genetic syndromes

Most adrenal cortex cancers are not inherited (they are sporadic), but some (up to 15%) are caused by a genetic defect. This is more common in adrenal cancers in children.

Li-Fraumeni syndrome

The [Li-Fraumeni syndrome](#)¹ is a rare condition that is most often caused by a defect in the *TP53* gene. People with this syndrome have a high risk of developing several types of cancer, including [breast cancer](#)², [bone cancer](#)³, [brain cancer](#)⁴, and adrenocortical cancer.

Beckwith-Wiedemann syndrome

People with Beckwith-Wiedemann syndrome have large tongues, are tall, and have an increased risk for developing cancers of the [kidney](#)⁵, [liver](#)⁶ and adrenal cortex.

Multiple endocrine neoplasia (MEN1)

People with MEN1 have a very high risk of developing tumors of 3 glands: the [pituitary](#)⁷, parathyroid, and [pancreas](#)⁸. About one-third to one-half of people with this condition also develop adrenal tumors. In most cases, these adrenal tumors are adenomas (benign) and non-functional (do not make hormones). However, some adenomas might be functional and make hormones, such as aldosterone and cortisol. Adrenal adenomas usually do not cause any symptoms. This syndrome is caused by defects in a gene called *MEN1*. People who have a family history of MEN1 or pituitary, parathyroid, pancreas, or adrenal cancers should ask their doctor if they might benefit from [genetic counseling](#)⁹.

Familial adenomatous polyposis (FAP)

People with this [syndrome](#)¹⁰ develop hundreds of polyps in the large intestine. These polyps will lead to colon cancer if the colon is not removed. FAP patients may also develop tumors elsewhere, like the adrenal glands. But, most adrenal tumors in people with FAP are benign adenomas. This syndrome is caused by defects in a gene called *APC*.

Lynch syndrome or hereditary nonpolyposis colorectal cancer (HNPCC)

[Lynch syndrome](#)¹¹ (formerly known as HNPCC) is an inherited genetic disorder that increases the risk of [colorectal cancer](#)¹², stomach cancer, and some other cancers, including adrenocortical cancer. In most cases, this disorder is caused by a defect in either the *MLH1* or *MSH2* gene, but other [genes](#)¹³ can cause Lynch syndrome, including *MSH6*, *PMS2*, and *EPCAM*.

Lifestyle and environmental factors

Risk factors such as being overweight, living a sedentary lifestyle, and being exposed to cancer-causing substances in the environment can affect a person's risk of many types of cancer. Smoking, in particular, has been suggested as a risk factor for adrenal cancer.

Hyperlinks

1. www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes/li-fraumeni-syndrome.html
2. www.cancer.org/cancer/types/breast-cancer.html
3. www.cancer.org/cancer/types/bone-cancer.html
4. www.cancer.org/cancer/types/brain-spinal-cord-tumors-adults.html
5. www.cancer.org/cancer/types/kidney-cancer.html
6. www.cancer.org/cancer/types/liver-cancer.html
7. www.cancer.org/cancer/types/pituitary-tumors.html
8. www.cancer.org/cancer/types/pancreatic-cancer.html
9. www.cancer.org/cancer/risk-prevention/genetics.html
10. www.cancer.org/cancer/types/colon-rectal-cancer/causes-risks-prevention/genetic-tests-screening-prevention.html
11. www.cancer.org/cancer/risk-prevention/genetics/family-cancer-syndromes/lynch-

What Causes Adrenal Cancer?

1. www.cancer.org/cancer/risk-prevention/genetics.html
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Can Adrenal Cancer Be Prevented?

Because adrenal cancer is quite rare, we do not yet have a way to prevent it . However, it is always important to follow general recommendations to lower cancer risk, such as:

- Avoid smoking
- Avoid exposures to cancer-causing chemicals
- Consider genetic testing if you have a family history of adrenal cancer or related cancers.

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